

SC NAACP v. Alexander,
D.S.C. Case No. 3:21-cv-03302-MGL-TJH-RMG

EXHIBIT B

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

UNITED STATES DISTRICT COURT
DISTRICT OF SOUTH CAROLINA
CASE NO. 3:21-CV-03302-MBS-TJH-RMG
-----x
THE SOUTH CAROLINA CONFERENCE OF THE
NAACP, et al,
Plaintiffs,
-against-
THOMAS C. ALEXANDER, et al,
Defendants.
-----x
July 21, 2022
9:30 a.m.

ZOOM VIRTUAL CONFERENCE

VIDEOCONFERENCE Examination
Before Trial of SEAN PATRICK TRENDE, taken
by the Defendants, via Zoom Technology,
pursuant to Notice, held before R. Bobbie
Levy, a Certified Shorthand Reporter and
Notary Public of the State of New York.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

A P P E A R A N C E S :

ARNOLD & PORTER KAYE SCHOLER LLP
Attorneys for Plaintiffs
601 Massachusetts Avenue NW
Washington, D.C. 20001
BY: JOHN FREEDMAN, ESQ.

AMERICAN CIVIL LIBERTIES UNION
ACLU
Attorneys for Defendant
Thomas Alexander
125 Broad Street, 18th Floor
New York, New York 10004

BY: ADRIEL CEPEDA DERIEUX, ESQ.
-and-
SAMANTHA OSAH, ESQ.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

A P P E A R A N C E S : (Continued)

NEXSEN PRUET, LLC
Attorneys for House Defendants
And Chris Murphy, Wallace Jordan
And James Lucas
104 South Main Street
Greenville, South Carolina
29601

BY: KONSTANTINE DIAMADURAS, ESQ.

JONES DAY
Attorneys for Senate Defendants
Thomas Alexander and Luke Rankin
51 Louisiana Avenue NW
Washington, D.C. 20001

BY: JOHN GORE, ESQ.
-and-
ADRIEL CEPEDA DERIEUX, ESQ.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

A P P E A R A N C E S : (Continued)

BURR FORMAN
Attorneys for Defendants
South Carolina Election Commission
1221 Main Street
Columbia, South Carolina 29201

BY: M. ELIZABETH CRUM, ESQ.

ALSO PRESENT:
DAVID ROTHSTEIN, Videographer
MINK AGGAWAL

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

S T I P U L A T I O N S

IT IS HEREBY STIPULATED AND
AGREED by and among the >>> Attorneys for
the respective parties hereto that filing
and sealing be and the same are hereby
waived.

IT IS FURTHER STIPULATED AND
AGREED that all objections except as to
the form of the question, shall be
reserved to the time of the trial.

IT IS FURTHER STIPULATED AND
AGREED that the within examination may be
signed and sworn to before any notary
public with the same force and effect as
though signed and sworn to before this
Court.

1 S. Trende

2 MR. DIAMADURAS: I will be
3 ordering a copy, an electronic copy of
4 today's deposition.

5 MR. GORE: I will be ordering a
6 copy of today's transcript.

7 THE VIDEOGRAPHER: Good morning.
8 We are going on the record at 9:37
9 a.m. on July 21, 2022. Please note
10 that the microphones are sensitive and
11 may pick up whispering, private
12 conversations and cellular
13 interference.

14 Please turn off all cell phones
15 or place them away from the
16 microphones as they can interfere with
17 the deposition audio. Audio and video
18 recording will continue to take place
19 unless all parties agree to go off the
20 record.

21 This deposition is being held
22 remotely. This is media unit number 1
23 of the video recorded deposition of
24 Sean Trende, located in Delaware,
25 Ohio. This deposition is being taken

1 S. Trende
2 by counsel for the plaintiffs in the
3 matter of the South Carolina state
4 conference of the NAACP et al, versus
5 Thomas C. Alexander, et al. Filed in
6 the United States District Court for
7 the District of South Carolina,
8 Columbia division. Case number 3:21CV
9 03302 MBS-TJH-RMG.

10 My name is David Rothstein from
11 the firm Veritext, New York and I'm
12 the videographer. The court reporter
13 is Bobbie Levy from the firm Veritext
14 New York. I am not related to any
15 party in this action. Nor am I
16 financially interested in the outcome.

17 Counsel will be noted on the
18 stenographic record. Will the court
19 reporter please swear in the witness.

20 READ BY THE COURT REPORTER: Due
21 to the need for this deposition to
22 take place remotely because of the
23 government's order for social
24 distancing, the parties will stipulate
25 that the court reporter may swear in

1 S. Trende

2 the witness over Veritext virtual
3 conference and that the witness has
4 verified that he is, in fact, Sean
5 Patrick Trende.

6 MR. FREEDMAN: So stipulated for
7 the plaintiffs.

8 MR. GORE: So stipulated for
9 Senate Defendants.

10 MR. DIAMADURAS: So stipulated
11 for House defendants.

12 MS. CRUM: So stipulated for
13 Election Commission defendants.

14

15

16 S E A N P A T R I C K T R E N D E ,
17 called as a witness, having been first
18 duly sworn by the Notary Public, was
19 examined and testified as follows:

20 TAKEN BY

21 THE COURT REPORTER:

22 Q Please state your name for the
23 record.

24 A Sean Patrick Trende.

25 Q What is your current address?

1 S. Trende

2 A 1146 Elderberry Loop, Delaware,
3 Ohio 43015.

4 EXAMINATION BY

5 MR. FREEDMAN:

6 Q Good morning, Mr. Trende. My
7 name is John Freedman I represent the
8 plaintiffs in this action. Could you
9 please state your full name for the
10 record, spelling your last name?

11 A Sean Patrick Trende,
12 T-r-e-n-d-e.

13 Q Am I correct that you used to be
14 an attorney, sir?

15 A I think I still am.

16 Q Got it. Are you still
17 practicing?

18 A No.

19 Q Did you ever take a deposition
20 as an attorney?

21 A Yes.

22 Q How many?

23 A Several. I couldn't count.
24 More than 10.

25 Q So you are familiar with the

1 S. Trende

2 ground rules, right?

3 A Yes.

4 Q All right. Well, for purposes
5 of today's deposition I just want to make
6 sure our record is clear on a couple of
7 points. First of all, do you understand
8 that you are testifying under oath today?

9 A Yes.

10 Q Do you understand that a court
11 reporter is transcribing this deposition?

12 A Yes.

13 Q With that in mind, do you
14 understand you need to answer questions
15 audibly and clearly?

16 A Yes.

17 Q Will you tell me if you don't
18 understand a question or need me to repeat
19 any part of it?

20 A Yes.

21 Q Is there any reason you can't
22 testify truthfully today?

23 A No.

24 Q Any reason that you can't give
25 full, complete and accurate testimony

1 S. Trende

2 today?

3 A No.

4 Q Are you on any medications or
5 experiencing any condition that would
6 prevent you from giving full and truthful
7 testimony today?

8 A No.

9 Q Okay. If at any time you would
10 like to take a break please let me know
11 and I will try to accommodate you. The
12 only thing I ask is that if I have a
13 question pending, that you finish
14 answering that question before asking for
15 a break. Do you understand that?

16 A Yes.

17 Q Now I know you have been deposed
18 before. Can you tell me approximately how
19 many times you have been deposed?

20 A I would spitball it at about 20
21 times.

22 Q Have you had any depositions
23 since your last deposition concerning
24 South Carolina on April 5, 2022?

25 A I think I was deposed once in

1 S. Trende

2 Montana but I'm not entirely sure of the
3 timeline.

4 Q Any other depositions or
5 possible depositions since your April 5th
6 deposition?

7 A I don't believe so.

8 Q For today's deposition where are
9 you physically located?

10 A I'm in my home office in
11 Delaware, Ohio.

12 Q Is anyone in the room with you?

13 A No.

14 Q Did you bring any materials with
15 you today for the deposition?

16 A I have the folder of exhibits
17 that you sent me open on my desktop.

18 Q Anything else?

19 A No.

20 Q For the documents you have are
21 there any notes on the documents, have you
22 taken notes?

23 A No.

24 Q Other than defense counsel, have
25 you spoken to anyone else about your work

1 S. Trende

2 in this matter?

3 A In passing, with my wife.

4 Q Anyone else?

5 A No.

6 Q Have you spoken with any member
7 of the South Carolina Legislature in
8 conjunction with this case?

9 A No.

10 Q I can give you some names. See
11 if it jogs your memory. Have you spoken
12 with Senator Luke Rankin?

13 A No.

14 Q Have you spoken with Senator
15 Campsen?

16 A No.

17 Q Have you spoken with
18 Representative Jay Jordan?

19 A No.

20 Q Have you ever spoken to any
21 South Carolina legislative staff in
22 conjunction with this case?

23 A No.

24 Q I'll give you, again, a couple
25 of names and see if it jogs your memory.

1 S. Trende

2 Have you spoken with Patrick Dennis about
3 this case?

4 A No.

5 Q Have you spoken with Andy
6 Fiffick about this case?

7 A No.

8 Q Have you spoken with Charlie
9 Terrini about this case?

10 A No.

11 Q Have you spoken with anybody
12 from the National Republican Redistricting
13 Trust in conjunction with this case?

14 A No.

15 Q Have you ever spoken with Andy
16 Kincaid?

17 A I don't know who Andy Kincaid
18 is.

19 Q Fair enough. Have you ever
20 spoken with Dale Oldham?

21 A Not in conjunction with this
22 case but I have spoken with him.

23 Q What was the context in which
24 you have spoken with Mr. Oldham?

25 A I had multiple contacts with him

1 S. Trende

2 over the course of the past decade.

3 Q Any in the last year?

4 A I believe he reached out to me
5 about doing some work in a different
6 matter.

7 Q Have you had any discussions
8 with Mr. Oldham about South Carolina?

9 A No.

10 Q Have you had any discussion with
11 National Republican Redistricting Trust
12 outside Counsel Holtzman Vogel?

13 A I have spoken with Jason
14 Torchinsky.

15 Q In the last year?

16 A Yes.

17 Q Have you spoken with him about
18 South Carolina?

19 A No.

20 Q Have you talked with him about
21 other jurisdictions?

22 A Yes.

23 Q Which jurisdictions?

24 A I doubt if I could give a
25 complete list. I know I worked with him

1 S. Trende

2 on the Belize case that I worked on. I
3 worked with him on amicus brief for the
4 Pennsylvania matter. And he's reached
5 out to me about matters where I haven't
6 been disclosed.

7 Q Do you know what the National
8 Republican Redistricting Trust is?

9 A Yes.

10 Q What is it?

11 A My understanding is it's a group
12 to work on getting maps in the cycle to
13 work in a way that's favorable to the
14 Republican Party.

15 Q Have you ever spoken with
16 anybody from the National Republican
17 Redistricting Trust in this cycle?

18 A Yes.

19 Q Who?

20 A Adam Kincaid.

21 Q Which jurisdictions have you
22 discussed with Mr. Kincaid?

23 A Again there have been several.
24 The ones that come most prominently to
25 mind are New York. And Pennsylvania.

1 S. Trende

2 Q Have you had any discussions
3 with Adam Kincaid about South Carolina?

4 A No.

5 Q Have you had any discussions
6 with anyone else from the National
7 Republican Redistricting Trust about South
8 Carolina?

9 A No.

10 Q Have you spoken to anyone who
11 actually participated in the redistricting
12 of the South Carolina Congressional
13 districts for this cycle?

14 A I don't know if Mr. Gore did but
15 otherwise, no.

16 Q And you didn't participate in
17 the Congressional Redistricting yourself,
18 correct?

19 A That's correct.

20 Q You weren't asked to draw maps
21 for consideration, were you?

22 A I was not.

23 Q So with respect to the
24 Congressional plan that's discussed in
25 your report did anyone from the South

1 S. Trende

2 Carolina Legislature ever tell you or
3 communicate to you why any of the
4 districts were drawn the way that they
5 were?

6 A No.

7 Q So you have no direct knowledge
8 of why any of the districts in the South
9 Carolina Congressional map were drawn the
10 way that they were, correct?

11 A To the extent that would come
12 from talking to members of the South
13 Carolina Legislature, I guess that's
14 correct.

15 MR. FREEDMAN: This will be our
16 first experiment to see if Exhibit
17 Share is actually working since I've
18 not gone through.

19 I'm going to introduce as
20 Exhibit 1 the copy of your deposition
21 notice.

22 (Whereupon, amended notice of
23 deposition was marked as Exhibit 1 for
24 identification, as of this date.)

25 THE WITNESS: Are your exhibits

1 S. Trende

2 highlighted or can I use the ones that
3 were provided to me?

4 MR. FREEDMAN: So you can. The
5 number might be so if you can work off
6 the screen that's better.

7 So I have introduced as Exhibit
8 1, the amended notice of deposition.
9 Can everyone see it?

10 MR. GORE: No, I can't see it.
11 I just want to note for the record I
12 also can't access Exhibit Share but I
13 can pull up the exhibits on my screen
14 from the folder that you provided a
15 few days ago.

16 (Discussion off the record)

17 Q So the document I introduced I
18 think was tab 43. Document number 43?

19 A Yes, I have it open.

20 Q Okay. Have you seen this
21 before?

22 A Yes.

23 Q I want to turn to schedule A.
24 Which is the last page of this. Exhibit
25 A. And I just want to walk through

1 S. Trende

2 categories of documents. The first
3 category is "all materials and documents
4 reflecting facts or data considered in
5 framing your opinions in the Congressional
6 map phase of the above captioned case,
7 Congressional case."

8 What was done to collect
9 documents pursuant to this item?

10 A Shortly after my report was
11 filed, I gathered the code and all the
12 materials that were relied upon. And
13 provided them to counsel.

14 Q Do you know what was collected?

15 A I don't recall except that it
16 should be sufficient material to recreate
17 the data presented in my report and
18 anything I relied upon.

19 Q Do you know if those materials
20 were turned over?

21 A I don't.

22 Q Okay. Turning to category 2:
23 "All data code materials and documents you
24 relied upon and/or may rely upon in
25 reaching your opinions in the

1 S. Trende

2 Congressional case, including all
3 electronic and non-publicly available
4 written data that you relied on including
5 any computer code used to process or
6 interpret such data."

7 Can you tell me what was done to
8 collect documents pursuant to this item?

9 A The answer to that is the same
10 as with the first.

11 Q Did you -- and what happened to
12 the documents that were collected?

13 A To my recollection, they were
14 transferred to Mr. Gore.

15 Q And do you know if counsel
16 turned them over?

17 A I do not.

18 Q Okay. Moving to category 3:
19 "Any materials, documents or
20 communications exchanged with defendants
21 in the Congressional case or other
22 documents reflecting the content of such
23 communications."

24 Do you know what was done to
25 collect documents pursuant to this item?

1 S. Trende

2 A I know I have never communicated
3 with any of the defendants in this case.
4 Assuming Mr. Gore is not a defendant.
5 And so there was nothing to be done,
6 because I am certain I have never
7 communicated with any of those people.

8 Q Okay. The fourth item: "All
9 correspondence, email between you and any
10 attorney who represents defendants in the
11 Congressional case that, sub i. Relate to
12 your compensation.

13 "Sub double ii. Identify facts
14 or data provided to you by attorneys that
15 you considered in forming your opinions or
16 sub sub III, identify assumptions that
17 were provided to you by attorneys and upon
18 which you rely in forming your opinions."

19 Can you tell me what was done to
20 collect documents pursuant to this item?

21 A I went through my Outlook inbox.
22 And filtered my emails to or from Mr.
23 Gore. I reviewed those emails and I sent
24 the emails to him that were responsive.

25 Q And do you recall what was

1 S. Trende

2 turned over to Mr. Gore?

3 A I think it was mostly drafts of
4 the retaining agreement.

5 Q Anything else?

6 A I don't think there's anything
7 other than documents that related to
8 compensation.

9 Q Okay. Did counsel provide you
10 with documents that contained facts or
11 data that you considered in forming your
12 opinions?

13 A No.

14 Q Did counsel provide any
15 assumptions to you that were, that you
16 relied on in forming your opinions?

17 A No.

18 Q Do you know what happened to
19 the, for the correspondence that you
20 turned over to Mr. Gore, do you know
21 whether that was produced?

22 A No.

23 Q And other than Mr. Gore, have
24 you had any other communications with any
25 other defense counsel?

1 S. Trende

2 A No, I didn't know there were
3 other defense counsel until today.

4 Q Turning to the fifth category:

5 "All invoices, bills, billing
6 records, time records and expense records
7 connected to any work paid for by
8 defendant or defendants' counsel to you,
9 including but not limited to information
10 sufficient to identify, A, your hourly
11 rate.

12 "B, the amount of time you have
13 spent in connection with your involvement
14 in the Congressional case. And C, the
15 dates on which such activity or work was
16 performed."

17 Do you know what was done to
18 collect documents pursuant to that item?

19 A I have sent one invoice to Mr.
20 Gore. Which has the amount of times I
21 have spent in connection with my
22 involvement in the Congressional case, on
23 the first page, as well as the dates on
24 which such activity or work was performed
25 on the second page.

1 S. Trende

2 And I believe my hourly rate is
3 in that document as well, as well as my
4 reports.

5 Q And that one invoice is the only
6 invoice you have issued so far?

7 A That's correct.

8 Q Do you have any other time
9 records or billing records for your work
10 on this case that are not reflected on
11 billed time?

12 A No.

13 Q You haven't started pulling
14 together your next invoice in the case
15 yet?

16 A I have not. I haven't done work
17 in this case until it became time to get
18 ready for the deposition.

19 Q Do you have notes about how much
20 time you spent preparing for the
21 deposition?

22 A No.

23 Q Let's pull up your report which
24 is exhibit 0 -- or I am sorry. It's not
25 exhibit 0. It's the document with the tab

1 S. Trende

2 zero in the materials we sent.

3 MR. FREEDMAN: On Exhibit Share
4 I'm going to introduce this as Exhibit
5 2.

6 (Whereupon, expert report dated
7 4/18/22 was marked as Exhibit 2 for
8 identification, as of this date.)

9 Q Do you have a copy of your
10 report, your April 18th report in front of
11 you?

12 A I do.

13 Q What is Exhibit 2?

14 A It is the expert report of Sean
15 P. Trende.

16 Q When did you start writing this
17 report?

18 A Shortly before Easter.

19 Q Who prepared this report?

20 A I did.

21 Q Did anyone help you?

22 A There were drafts exchanged with
23 counsel but beyond that, no.

24 Q Any counsel besides Mr. Gore?

25 A No. As I have testified, I

1 S. Trende

2 didn't know there were counsel besides
3 Mr. Gore for the defendants until this
4 deposition.

5 Q How many drafts of this report
6 were prepared?

7 A I don't know.

8 Q Can you give me a ballpark?

9 A Perhaps five.

10 Q Did the reviewers provide edits
11 to the report?

12 A I don't know if they were edits
13 or suggestions, yeah, there were some
14 stylistic edits, so yes.

15 Q Okay.

16 MR. FREEDMAN: We are going to
17 just quickly introduce as the next
18 exhibit your May 4th report, which is
19 tab 3 in the material sent.

20 (Whereupon, rebuttal report
21 dated 5/4/22 was marked as Exhibit 3
22 for identification, as of this date.)

23 (Pause)

24 Q Sir, I have introduced on
25 Exhibit Share as Exhibit 3 your rebuttal

1 S. Trende

2 report from May 4. Do you have a copy of
3 that in front of you?

4 A Yes.

5 Q When did you start writing your
6 rebuttal report?

7 A The initial report was filed on
8 the 18th; it would have been shortly
9 after that.

10 Q Let me take a step back and just
11 make sure my foundation is clear. What is
12 Exhibit 3?

13 A It's the rebuttal report of Sean
14 P. Trende.

15 Q Okay. Who prepared Exhibit 3?

16 A I did.

17 Q Did anyone help you?

18 A Other than drafts exchanged with
19 counsel, no.

20 Q Who reviewed Exhibit 3 before
21 the disclosure was made?

22 A To my knowledge, Mr. Gore.

23 Q Do you know were there drafts of
24 this report before the disclosure was
25 finalized?

1 S. Trende

2 A Yes.

3 Q Do you recall how many drafts of
4 this report there were?

5 A Again I'm just doing a spitball
6 estimate and saying five.

7 Q Did Mr. Gore provide edits on
8 this report?

9 A Yes.

10 Q Now do the two reports I have
11 shown you, the April 18 and May 4 reports,
12 Exhibits 2 and 3, do they contain a
13 complete statement of all opinions you
14 intend to offer at trial in this case?

15 A I don't know exactly what
16 opinions Mr. Gore intends to introduce if
17 he intends to have me testify at trial.
18 But I would not envision offering
19 opinions in addition to what's included
20 in these reports.

21 Q You are not planning to express
22 any opinions beyond those set forth in
23 these two reports at trial, right?

24 A That's correct.

25 Q Do the two reports I have shown

1 S. Trende

2 you, your April 18 and May 4 reports,
3 Exhibits 2 and 3, contain a complete
4 statement of the basis or reasons for your
5 opinions in this matter?

6 A I believe so.

7 Q Do the two reports I have shown
8 you, your Exhibits 2 and 3, contain all
9 the analysis you intend to present at
10 trial in this case?

11 A If I were to testify, I would
12 not envision expressing opinions or
13 analysis beyond what's included in these
14 reports.

15 Q Beyond what's in these reports
16 have you reached any other opinions that
17 you intend to offer at trial?

18 A No.

19 Q Do you have any plans sitting
20 here today to do any additional analysis
21 to be presented at trial?

22 A No.

23 Q Have you been asked to do any
24 additional analysis beyond what's set
25 forth in your two reports?

1 S. Trende

2 A Well, I was asked to review the
3 materials that you provided as potential
4 exhibits for this deposition. And some
5 of them I have not seen before. So I
6 took a look at them to the extent they
7 were helpful.

8 But as far as new opinions
9 responsive to things set forth by
10 plaintiff's experts, no.

11 Q All right. So maybe the best
12 way of asking this, is are you planning to
13 supplement either your April 18 or May 4
14 reports?

15 A No. I have done no work to
16 create a supplement and have no
17 intentions to do so.

18 Q Okay. If you could open your
19 April 18 report, Exhibit 2, to pages 7 and
20 8. I want to ask about the documents you
21 relied on.

22 (Pause)

23 A Okay.

24 Q Now on pages 7 and 8 you list
25 the various materials you relied upon in

1 S. Trende

2 formulating your opinions, correct?

3 A That's correct.

4 Q Is this the complete list of
5 materials you considered in forming your
6 opinions in this case?

7 A I believe so.

8 Q Is there anything else you
9 considered in formulating the opinions
10 identified in your initial report?

11 A Not to my knowledge. As we walk
12 through the document in the deposition,
13 things may spring to mind but I was
14 pretty cautious about writing down things
15 that I relied upon.

16 Q Okay. At the bottom of page 7
17 and the top of page 8, you cite two court
18 decisions: The Backus and the Colleton
19 County decisions. Do you see those?

20 A Yes.

21 Q Did you consider any other
22 materials or information from those cases
23 in forming your opinions?

24 A I don't understand the question.

25 Q Did you look at the pleadings or

1 S. Trende

2 expert reports or any other documents from
3 those, any other documents from those
4 cases in rendering your opinions?

5 A Oh, I see. No. I did not.

6 Q Now you also on page 8 identify
7 public hearing transcripts available at
8 the Senate redistricting website. I just
9 want to be clear what you reviewed. Can
10 you tell me what that represents?

11 A That was really included more in
12 the interest of completeness. Because I
13 did go through some of the public hearing
14 transcripts contained at the website
15 listed. They were not a substantial
16 contributing factor to the report,

17 Q Okay. So just so I'm clear,
18 when you are referring to the public
19 hearing transcripts are you referring to
20 the 10 hearings conducted by the Senate
21 Judiciary Committee in July and August
22 2021 or something else?

23 A I believe that's what's listed
24 there and that's what I'm referring to.

25 Q The Senate Judiciary Committee

1 S. Trende

2 hearings?

3 A Yes.

4 Q Did you also review any of the
5 Senate or House legislative hearings
6 before today over the actual map?

7 A No.

8 Q Do you know whether any of the
9 hearing transcripts you reviewed from the
10 public hearings were after the census
11 bureau released the 2020 decennial census
12 redistricting data?

13 A No.

14 Q Okay. At the bottom of page 8
15 you say that you, that all shaped files
16 are projected using the WGS84 projection.
17 What does that mean?

18 A So there's a difficulty in
19 mapmaking, because the earth's surface is
20 spherical. And when you are making a
21 map, you are projecting it onto a flat
22 piece.

23 It's like if you were to peel an
24 orange and try to smash it down for some
25 strange reason flat on the table, you

1 S. Trende

2 would end up with lumps; it wouldn't go
3 naturally.

4 And so there are various
5 projections that have been suggested for
6 making that transformation. And the
7 WGS84 projection is one of them.

8 Q Okay. And what is the
9 significance of the WGS84 projection, like
10 how is it different from other ways you
11 could have done this?

12 A Well, there's the classic
13 projection of the Mercator projection,
14 which is what most maps you see around
15 are where the polar regions kind of
16 spread wide open. And you end up with
17 Greenland being roughly the size of
18 Africa, which is obviously inaccurate.

19 I chose -- there are at least
20 hundreds of projections, NAD 83. And
21 there are specific NAD 83 projections for
22 different states. I used of the WGS84
23 projection because the maps I created
24 rely on open street map for the
25 backgrounds. And open street map uses

1 S. Trende

2 the WGS84 projection.

3 And so to have everything line
4 up, that's the projection to use. I'm
5 not aware of any substantive difference
6 if I were to use the NAD 83 or the
7 latitude where South Carolina is
8 something like Mercator.

9 Q Okay. I want to just shift to
10 your rebuttal report and also go over the
11 materials considered for the rebuttal
12 report. If you could shift to Exhibit 3.
13 Your May 4th report.

14 A Okay.

15 Q Now your May 4th report doesn't
16 contain a list of the facts or documents
17 or data you considered in forming the
18 opinions expressed in this report, right?

19 A No.

20 Q Your May 4th report contains
21 sections discussing the reports of
22 plaintiff's experts, Dr. Imai and
23 Dr. Ragusa, right?

24 A If does. And I'm not sure. I
25 think there was a negative in your

1 S. Trende

2 question before and when I answered it
3 no. So to answer it in a complete
4 sentence it doesn't include a statement
5 of what I relied upon.

6 Q Okay. Thank you for making sure
7 that's clear. Just so that we are clear,
8 I mean presumably you relied on,
9 presumably, strike that.

10 Presumably you considered the
11 reports of Dr. Imai and Dr. Ragusa in
12 formulating the opinions in your May 4th
13 report, correct?

14 A Yes. Both of those are
15 referenced in the report. So I clearly
16 relied upon them.

17 Q How did you get copies of those
18 reports?

19 A They were likely transferred by
20 counsel.

21 Q Did someone send them to you?

22 A Yes, it would have been Mr.
23 Gore.

24 Q Was that by email?

25 A Yes. It would have been by

1 S. Trende

2 email.

3 Q The invoice that you produced
4 yesterday also references analysis that
5 you performed with Dr. Imai's code and
6 output. Are Dr. Imai's code and output
7 something you considered in formulating
8 your opinions in the May 4th report?

9 A That's a good question that I
10 could give an extremely pedantic answer
11 to. But they certainly were needed to
12 create the data and information upon
13 which I relied.

14 Q And how were Dr. Imai's code and
15 output transmitted to you?

16 A That I don't remember. Because
17 sometimes I would say email from counsel
18 but sometimes the documents are too big
19 and I have had, I think I have had this
20 with Dr. Imai where it has to be
21 downloaded. So I'm not sure.

22 Q When you were looking for
23 documents responsive to the deposition
24 notice document request, did you look at,
25 did you look for correspondence from

1 S. Trende

2 counsel where materials or data that you
3 considered in preparing your rebuttal
4 report were considered?

5 A That certainly would have been
6 part of my review. It didn't really
7 click with me until you asked the
8 question that yes, Dr. Imai's and
9 Dr. Ragusa's reports would have been
10 relied upon.

11 Q Okay. Beyond Dr. Imai's and
12 Dr. Ragusa's reports and Dr. Imai's code
13 and output, did you consider anything else
14 in formulating the opinions expressed in
15 your May 4th report?

16 A I don't believe there is
17 anything besides what's referenced in the
18 initial report upon which I relied. It
19 would have been the same basic underlying
20 data sets and sources beyond what's
21 referenced in the report.

22 Q Now your May 4th report doesn't
23 mention the other plaintiff's experts,
24 Dr. Duchin, Dr. Liu or Dr. Bagley,
25 correct?

1 S. Trende

2 A Without making us sit through
3 the exercise of me reading the report, I
4 think that's right and I have no reason
5 to doubt you.

6 Q Is it fair that you have no
7 opinions you intend to offer at trial
8 about the reports filed by Dr. Duchin,
9 Dr. Liu or Dr. Bagley?

10 A Certainly not their opening
11 reports. I don't know how things work
12 with their rebuttal reports since I know
13 Dr. Liu, Dr. Bagley and Dr. Duchin filed
14 rebuttal reports to my opinion. And
15 Dr. Ragusa.

16 Q Okay. So just so we are clear,
17 as to their initial reports you are not
18 planning to offer any opinions concerning
19 the initial reports of Dr. Duchin, Dr. Liu
20 or Dr. Bagley, correct?

21 A That's correct.

22 Q And I'll ask the question asked
23 earlier. Are you planning to supplement
24 your reports in any way to address the
25 rebuttal reports of Dr. Duchin, Dr. Liu,

1 S. Trende

2 Dr. Bagley or Dr. Ragusa?

3 A No. I don't intend to do any
4 supplemental reports or work respecting
5 the expert reports of Dr. Duchin,
6 Dr. Liu, L-i-u or Dr. Bagley.

7 Q So let me circle back. Are you
8 planning to offer any opinions at trial
9 about the analysis presented by
10 Dr. Duchin, Dr. Liu or Dr. Bagley?

11 A I have no idea what might be
12 asked as sort of rehabilitation to the
13 extent you cross me on their rebuttal
14 reports. But with respect to their
15 initial reports, I don't have any
16 intention to testify with respect to
17 those.

18 Q Okay. And with regard to their
19 rebuttal reports, putting aside from I
20 might ask you on cross-examination, do you
21 have any plans to testify about their
22 rebuttal reports in your direct testimony?

23 A Well, again, I don't have, I
24 don't even know if I'll be testifying
25 live at trial. And I certainly haven't

1 S. Trende

2 and doubt I will draft my direct. But
3 no, I don't have any intentions to do so.

4 Q Okay. Sitting here today do you
5 have any opinions concerning Dr. Duchin's
6 rebuttal report?

7 A I have certainly read it and
8 given it thought. So I assume I have
9 opinions with respect to it. So yes.

10 Q What are your opinions with
11 regards to Dr. Duchin's rebuttal report?

12 A I couldn't rehearse them on the
13 fly. We would have to walk through that
14 report.

15 Q Are there any, sitting here
16 today are you prepared to express any
17 opinions regarding Dr. Duchin's report?

18 A Well, again not on the fly but
19 as we go through, if you show me
20 Dr. Duchin's rebuttal report and ask me
21 about something, there's a reasonable
22 chance I have an opinion about it.

23 So I'm not going to close myself
24 out of the ability to give that answer
25 two hours later if we are going through

1 S. Trende

2 Dr. Duchin's rebuttal report.

3 Q Do you know when Dr. Duchin's
4 rebuttal report was served?

5 A I do not.

6 Q It was served on May 4th. The
7 same day you served your rebuttal report.
8 So you have had over two months to express
9 any opinions you had regarding Dr.
10 Duchin's report or supplementary report.

11 Is there a reason you have not
12 prepared a supplemental report to address
13 Dr. Duchin's any criticisms you have,
14 Dr. Duchin's supplemental rebuttal report?

15 A Well, from what I was informed
16 about the scheduling order, it doesn't
17 include a supplement. And it's pretty
18 unusual in my experience to move to go
19 outside the scheduling order to write a
20 supplement. And I wasn't asked by
21 counsel to prepare one.

22 Q Same question with regard to
23 Dr. Liu. Is there a reason why, do you
24 have any, sitting here today can you tell
25 me any criticisms you have of Dr. Liu

1 S. Trende

2 based on his rebuttal report?

3 A Well, again it's the same basic
4 answer. These are not lengthy reports
5 but substantial reports. And so on the
6 fly, I certainly couldn't give you all my
7 thoughts and opinions on it.

8 That said, if you were to ask me
9 about things on cross, that I have
10 thought about or even at the time have
11 impressions about, I'm not inclined to
12 close myself out of the ability to give
13 that answer.

14 Q Sitting here today are you
15 prepared to identify any criticisms you
16 have of Dr. Liu based on his rebuttal
17 report?

18 A Well, again, two hours from now
19 if we go through Dr. Liu's rebuttal
20 report and you asked me about something,
21 I'll probably have given it some thought
22 and have opinions about it.

23 Nothing in it changed my mind
24 nor in Dr. Duchin's report. But beyond
25 that sitting right here, no, I could not

1 S. Trende

2 tell you what my specific opinions with
3 respect to Dr. Liu are.

4 Q Okay. And in the time since
5 Dr. Liu's rebuttal report was served in
6 early May, is there any reason why you
7 couldn't have expressed any opinions you
8 had concerning Dr. Liu's analysis in a
9 supplemental report?

10 A Well, again, to my
11 understanding, the scheduling order
12 doesn't provide for third or supplemental
13 reports to respond to expert opinions.

14 And in my experience it would be
15 unusual to revise the scheduling order to
16 provide for such reports. And beyond
17 that, I wasn't asked to do so by Counsel.

18 Q Okay. And then same question
19 with regard to Dr. Bagley. Sitting here
20 today, are you, sitting here today can you
21 articulate any criticisms you have of
22 Dr. Bagley based on his rebuttal report?

23 A Well, again, it's a substantial
24 report. So on the fly in response to an
25 open-ended question, I wouldn't be able

1 S. Trende

2 to come up with a list of responses or
3 objections to Dr. Bagley's report. With
4 that said, you may at some point in the
5 future ask me questions about Dr.
6 Bagley's report and I wouldn't want to
7 close myself out of being able to give an
8 answer there.

9 In addition, if you were to
10 cross me on things at trial, it's likely
11 I would have a response to them. But
12 again, sitting here right now at this
13 moment, in response to an open-ended
14 question, I can't give a list, no.

15 Q Sitting here today can you
16 identify any criticisms you have of
17 Dr. Bagley?

18 A Again, without going through the
19 rebuttal report I would not have
20 something in response to an open-ended
21 question.

22 Q Okay. And in the time since
23 Dr. Bagley searched his rebuttal report in
24 early May, is there any reason you don't
25 have prepared a supplemental report to

1 S. Trende

2 address any criticisms you have of

3 Dr. Bagley's report?

4 A Well, again, to my understanding
5 the scheduling order doesn't provide for
6 supplemental reports. And in my
7 experience it will be unusual to modify
8 scheduling order to do so. And I haven't
9 been asked to do so by counsel.

10 Q Do you know any of the
11 plaintiffs' experts, any of the five
12 individuals?

13 A Not on a personal level, no.

14 Q Do you know any of them on a
15 professional level?

16 A I have seen Dr. Imai, and
17 Dr. Duchin give testimony. But that's
18 the extent of it.

19 Q Are you familiar with Dr. Imai's
20 professional qualifications?

21 A In a general sense, yes.

22 Q Do you have any opinion about
23 his qualifications to provide his opinions
24 in his reports?

25 A I think he is certainly

1 S. Trende
2 qualified to run the simulations. To the
3 extent his opinions revolve around the
4 simulations, I don't think there's any
5 question about that in the mathematics
6 behind them he is, to my understanding,
7 not an election scholar; so there may be
8 areas where his opinions go beyond where
9 his teaching expertise is.

10 Q Are you familiar with
11 Dr. Duchin's professional qualifications?

12 A Generally, yes.

13 Q Do you have any question about
14 her qualifications to provide the opinions
15 in her reports?

16 A Well, again to my understanding,
17 Dr. Duchin is a mathematician, I have no
18 reason to doubt her qualifications
19 regarding the mathematics behind
20 simulations and running the simulations.

21 So my understanding she is not
22 an election scholar. And what I have
23 read of her published work tends to
24 mostly be on the mathematics of
25 simulations. So there may be areas where

1 S. Trende

2 her expert report goes beyond what her
3 mathematical qualifications are.

4 Q Are you familiar with
5 Dr. Ragusa's professional qualifications?

6 A No.

7 Q Do you have any question about
8 Dr. Ragusa's qualifications to provide the
9 opinions in his reports?

10 A I have no opinion about Dr.
11 Ragusa's professional qualifications,
12 period.

13 Q Are you familiar with Dr. Liu's
14 professional qualifications?

15 A No.

16 Q Do you have any question about
17 Dr. Liu's qualifications to provide the
18 opinions in his reports?

19 A I don't have any opinions about
20 Dr. Ragusa's professional qualifications
21 at all.

22 Q My question was actually about
23 Dr. Liu, not Dr. Ragusa.

24 A I am sorry if I misspoke. I
25 don't have any opinions about Dr. Liu's

1 S. Trende

2 professional qualifications at all.

3 Q Okay. For purposes of the
4 opinions you are seeking to express in
5 this case, what are you saying are your
6 fields of expertise?

7 A I don't believe I have
8 identified my fields of expertise. In my
9 experience, that's something that's
10 narrowed down and decided upon in the run
11 to trial.

12 With that said, I would say I
13 have expertise in American politics,
14 American elections, statistics related to
15 elections. In gerrymandering and perhaps
16 other subjects.

17 Q Do you have any sense what
18 professional disciplines or fields you are
19 going to ask the Court to be qualified in
20 in this case?

21 A I believe it's Mr. Gore who asks
22 that I be qualified in certain areas and
23 we have not had a discussion about what
24 those areas would be.

25 Q Okay. Now you didn't submit a

1 S. Trende

2 CV with your April 18 or May 4 reports,
3 correct?

4 A I thought we had but I'm not
5 sure.

6 Q So we got a CV that you
7 submitted with your February 10th report
8 in the state house case. I don't believe
9 we got a separate CV for the newer
10 reports. Do you think you submitted a CV
11 with your April or your May report?

12 A I thought we had. With the
13 April report. But I'm not sure.

14 Q Well, let me show you the CV I
15 have got which is from the, from the one
16 that was submitted with your February 10th
17 report concerning the state house map.

18 MR. FREEDMAN: That's document 2
19 and I will introduce it as Exhibit 4.

20 (Whereupon, curriculum vitae was
21 marked as Exhibit 4 for
22 identification, as of this date.)

23 Q Okay, so I have introduced as
24 Exhibit 4 the CV that was filed in
25 conjunction with your February 10th report

1 S. Trende

2 in the State House case. And I guess my
3 question is is this the latest version of
4 your CV?

5 A It is not.

6 Q How recently has your CV been
7 updated?

8 A I can get the exact date for you
9 at the break. But I believe in April.

10 Q What prompted you to update your
11 CV?

12 A It was probably for use in an
13 expert report.

14 Q Do you recall what changes were
15 made?

16 A Additional cases would have been
17 listed. And -- I probably would have
18 updated teaching political participation
19 and voting behavior to include spring
20 2022. I believe those would have been
21 the updates made.

22 Q Okay.

23 MR. FREEDMAN: I don't want to
24 belabor this. Mr. Gore, if the
25 updated CV was provided, if you could

1 S. Trende

2 point us in the right direction, I
3 would appreciate it. Otherwise, if
4 you could furnish it during a break
5 that would be great.

6 MR. GORE: Yeah, John, I'm
7 looking at the email I sent out with
8 his report attached and also attached
9 to his updated CV. I'm happy to
10 re-forward it.

11 Your copy of this email is
12 Monday, April 1. I am happy to
13 re-forward that to you if it's
14 helpful.

15 MR. FREEDMAN: If you could, I
16 would appreciate it.

17 MR. GORE: Sure.

18 MR. FREEDMAN: So I'll take a
19 look at that in a break, which we will
20 take in a few minutes. Just so I'm
21 clear, I mean I don't think we need to
22 look at it.

23 Q Is it still the case you do not
24 have, is it still the case you do not have
25 peer-reviewed academic publications?

1 S. Trende

2 (Pause)

3 A I have not published any
4 peer-reviewed articles.

5 Q Okay. And are there any, any
6 appointments you have had in academic
7 institutions that are not reflected in
8 your peer-reviewed report?

9 A As I said, the political
10 participation in voting behavior course
11 was taught in spring of 2022. So it
12 should have been updated to include that.

13 Q Which institution was that at?

14 A That was at the Ohio State
15 University.

16 Q Okay. The CV I have says that
17 your educational status says you expect to
18 receive your Ph.D. in this year in 2022;
19 is that still accurate?

20 A Yes.

21 Q Now in conjunction with your
22 February 10, 2022 report in the state
23 house case, you had language in that
24 report saying that you expected to receive
25 your Ph.D. in May 2022 and filed your

1 S. Trende

2 application to graduate. Do you recall
3 that?

4 A Yes.

5 Q There's not similar language in
6 your April 18th report. So let me just
7 ask just kind of baseline questions. Did
8 you receive your Ph.D. in May 2022?

9 A No, I did not.

10 Q What's the, I know you spent a
11 fair amount of time on this in your last
12 deposition. What's the status of your
13 dissertation defense?

14 A Two articles are written and
15 considered basically complete. I need to
16 write the third article.

17 Q Do you have, like, a defense
18 date?

19 A No.

20 Q I think at the time of your last
21 deposition, the report that you had done
22 on the use of spacial modeling in the
23 study of voting article had a placeholder
24 for your analysis on the application of
25 voting. Have you completed that analysis?

1 S. Trende

2 A Yes.

3 MR. FREEDMAN: All right. We
4 have been going a little over an hour.
5 Why don't we take a quick break and I
6 will take a look at the revised resent
7 resume and see if I can get Exhibit
8 Share up and running.

9 THE VIDEOGRAPHER: The time is
10 10:45 and we are going off the record.
11 This is the end of media unit number
12 1.

13 (Recess taken 10:45)

14 (Resumed: 10:58)

15 THE VIDEOGRAPHER: The time is
16 10:58 and we are back on the record.
17 This is the beginning of media unit
18 number 2.

19 MR. FREEDMAN: Mr. Trende, your
20 counsel provided me a copy of your
21 updated CV, another copy. So I'm
22 just, so the record is clear, I'm
23 going to introduce that as Exhibit 5.

24 (Whereupon, updated curriculum
25 vitae was marked as Exhibit 5 for

1 S. Trende

2 identification, as of this date.)

3 Q I don't have any questions about
4 it because I think it's consistent with
5 what you described of the updates just in
6 terms of your teaching experience.

7 Then I also wanted to just
8 briefly talk about your compensation. On
9 page 8 of your report you indicate you are
10 being compensated \$400 per hour. Is that
11 right?

12 A That's correct.

13 MR. FREEDMAN: And we received
14 in yesterday's production a copy of
15 your invoice. But I, just so the
16 record is clear I'm going to, I'm
17 going to introduce a copy of that as
18 an exhibit. So we will make that as
19 Exhibit 6.

20 (Whereupon, series of invoice
21 receipts was marked as Exhibit 6 for
22 identification, as of this date.)

23 Q Do you have a copy of that with
24 you? We just got it yesterday so it
25 wasn't in the materials we sent.

1 S. Trende

2 A I can probably pull it up.

3 Q I don't think that's necessary.
4 I just want to, like, the invoice receipts
5 reflect that you have got 87.25 hours on
6 the matter through your rebuttal report;
7 does that sound right?

8 A Just to make sure we are on the
9 same page, this is invoice number 100115?

10 Q Yes.

11 A Yes, that reflects 87.25 hours
12 work.

13 Q Okay. And as of that point you
14 had, if I have done the math right, about
15 45 hours on your opening report; is that
16 right?

17 A Without, I have no reason. I'm
18 assuming you did closer to the math so I
19 have no reason to dispute you on that.

20 Q Okay. And on the rebuttal
21 report you had about between 41 and 42
22 hours, something around there. Does that
23 sound about right?

24 A That sounds right.

25 Q Who has been cutting your checks

1 S. Trende

2 in this case?

3 A I believe the check comes from,
4 matter of fact, I know it is, because I
5 can see it. It comes from Jones Day.

6 Q Okay. All right, if you could
7 turn back to your report, Exhibit 2, your
8 April report. I want to ask about some of
9 your other expert work.

10 The discussion that starts at
11 the bottom of page 3 and runs through page
12 6 of the other matters in which you have
13 testified. First question is is this list
14 up to date and correct?

15 A I believe it is. There have
16 been a lot of them in the last year so
17 between it and my CV, it should have
18 everything. But there may have been an
19 oversight.

20 Q Okay. If you could walk through
21 the list of cases and identify the ones
22 which are gerrymandering matters. That's
23 probably the easiest way to narrow this
24 down a little bit.

25 A Political or racial?

1 S. Trende

2 Q Yes.

3 A So beginning on page 3 the work
4 for the Supreme Court of Virginia was
5 sort of an anti-gerrymandering issue.

6 Q Let me rephrase my question.
7 Which matters concern redistricting is
8 probably the easiest way to approaching
9 it?

10 A The work for the Supreme Court
11 of Virginia was certainly redistricting.
12 The work for the Supreme Court of Belize
13 was certainly redistricting. The work as
14 Voting Rights Act expert counsel for the
15 Arizona independent redistricting
16 commission was certainly redistricting.

17 The work in Dickson v. Rucho was
18 redistricting. Covington versus North
19 Carolina was a redistricting matter. A.
20 Philip Randolph Institute V. Smith was a
21 redistricting matter. Whitford v.
22 Nichol, N-i-c-h-o-l was a redistricting
23 matter. Common Cause v. Rucho was a
24 redistricting matter.

25 At the bottom of page 5 there's

1 S. Trende
2 a collection of three cases that were
3 consolidated. So for purposes of
4 simplicity, I'll just reference the
5 League of Women Voters of Ohio v. Ohio
6 Redistricting Commission. Those
7 consolidated matters were redistricting.

8 At the top of page 6, NCLCD v.
9 Hall and Harper v. Hall were
10 redistricting cases. Carter v. Chapman.
11 And Dressman v. Chapman were
12 redistricting matters. Which were
13 consolidated. Okay.

14 I'll spell this after I'm done.
15 Harkenrider v. Hochul.
16 H-a-r-k-e-n-r-i-d-e-r v. H-o-c-h-u-l was
17 a redistricting matter.

18 I don't even know how to
19 pronounce the plaintiff's name in this
20 one. It is S-z-e-l-i-g-a versus
21 L-a-m-o-n-e, Lamone.

22 And then there's an in re title
23 for a different case and the in re 2022
24 legislative redistricting of the state.
25 Graham v. Adams. And then NAACP v.

1 S. Trende

2 McMaster.

3 Q Thank you. Of the cases you
4 just identified, can you tell me which of
5 those matters involved claims of racial
6 gerrymandering?

7 A Well, the Virginia and Arizona
8 redistricting matters weren't claims but
9 obviously the work that was involved
10 there, trying to not draw racial
11 gerrymanders of, you know, the racial
12 gerrymandering concepts were important.
13 Dickson v. Rucho was a racial
14 gerrymandering case. The Covington case
15 was a racial gerrymandering case.

16 I don't know for the A. Philip
17 Randolph Institute, the Whitford v.
18 Nichol, the Common Cause v. Rucho, if
19 there was a there was a way that racial
20 gerrymandering was involved in the claim
21 but I certainly wasn't involved if it
22 was. And my sense is that there was
23 nothing.

24 The NCLCV v. Hall consolidated
25 cases involved racial gerrymandering

1 S. Trende

2 claims, to my understanding. They may
3 have been pure section 2 claims, I really
4 don't know.

5 And Carter v. Chapman, that was
6 another map drawing exercise. So while
7 it wasn't a claim, it was integrated into
8 trying to draw an acceptable map.

9 And Harkenrider v. Hochul was a
10 political gerrymandering claim but taking
11 into account the needs of the voting
12 rights act and minority representation
13 was integral to the case as with the
14 Lamone case in Maryland.

15 There was an aspect -- maybe
16 Graham v. Adams but that's a stretch.
17 And then certainly NAACP v. McMaster.

18 Q Okay, thank you. I just want to
19 walk through your gerrymandering cases
20 this cycle. So why don't we start with
21 Ohio, the League of Women Voters of Ohio
22 cluster. Who was your client in that
23 case?

24 A So this is a line of questioning
25 I always have difficulty with to give a

1 S. Trende

2 precise answer. If we can be satisfied
3 with I testify or I did reports on behalf
4 of the defendants, I think that's the
5 cleanest way to do it. I don't know
6 exactly who hired me in that matter.

7 Q All right. Do you know, for
8 example, like, do you know if the
9 defendants were, like, a state agency?

10 A So from, the named defendant was
11 the Ohio Redistricting Commission. So
12 there were certainly state agencies as
13 defendants.

14 Q Were you working with, were you
15 working for lawyers representing
16 republican Legislators or the Republican
17 Attorney General in the State of Ohio?

18 A I don't know who the lawyers
19 with whom I work represented.

20 Q Do you know who was funding your
21 work in that case?

22 A I believe my checks in that
23 matter came from Nelson Mullins.

24 Q Do you know whether the National
25 Republican Redistricting Trust funded your

1 S. Trende

2 work in that action?

3 A No.

4 Q No, you don't know or no, you
5 were not?

6 A No, I don't know.

7 Q How much were you paid on that
8 engagement?

9 A I don't know. Somewhere
10 probably in the 20 to 30,000 range.

11 Q Okay. Starting at the top of
12 page 6, the North Carolina cases. Who
13 were you, who was your work on behalf of
14 in that case?

15 A Again, a lot of these cases have
16 multiple defendants and sometimes teams
17 of lawyers. As a matter of fact, that
18 case I know did have at least three
19 different sets of lawyers.

20 And I don't know who had engaged
21 the lawyers for whom I worked. But my
22 checks in that matter came from Nelson
23 Mullins.

24 Q And do you know whether, do you
25 know who Nelson Mullins' client was?

1 S. Trende

2 A I do not.

3 Q Do you know whether they had a
4 party affiliation, whether they were
5 Democrats or Republicans or not
6 affiliated?

7 A I don't know.

8 Q Do you know whether the National
9 Republican Redistricting Trust funded your
10 work in the North Carolina cases?

11 A I don't believe they did. I
12 don't know.

13 Q How much were you paid on the
14 North Carolina engagements?

15 A Probably in the \$30,000 range.

16 Q Okay. The Pennsylvania amicus
17 customer work, the Chapman cases. Do you
18 know which party your work was on behalf
19 of in that case?

20 A It was a -- I think their
21 official name was like Voters of
22 Pennsylvania.

23 Q Did your client have a political
24 affiliation?

25 A I believe the voters -- well, I

1 S. Trende

2 shouldn't speculate, I don't know.

3 Q Do you know whether the voters
4 that you were working on behalf of were
5 Republicans?

6 A I don't.

7 Q How did you get paid in that
8 matter?

9 A I was paid by the law firm.

10 Q Which firm was that?

11 A It was a small boutique in
12 Pennsylvania. I don't remember their
13 names.

14 Q Do you know whether the National
15 Republican Redistricting Trust was funding
16 your work in that case?

17 A I don't.

18 Q How much were you paid for that
19 engagement?

20 A Perhaps \$20,000.

21 Q Okay. For the New York work,
22 which party were you working for in that
23 case?

24 A I believe there was only one set
25 of plaintiffs. I have to think.

1 S. Trende

2 (Pause)

3 A Yeah. So if there were
4 multiple, I believe there was only one
5 set of plaintiff's attorneys. So
6 certainly Harkenrider, I don't know if
7 there were multiple plaintiffs in that
8 case. I never met any of the plaintiffs.

9 Q Did the plaintiffs have any
10 political affiliation?

11 A I have no idea.

12 Q How did you get paid in that
13 matter?

14 A I submitted my invoices to
15 Troutman Sanders -- is it Troutman
16 Sanders or Troutman Pepper? I don't
17 know. I can't keep up with the names.

18 Q Do you know who was funding the
19 prosecution of that case?

20 A I don't.

21 Q Do you know whether the National
22 Republican Redistricting Trust was funding
23 the prosecution in that case?

24 A I don't.

25 Q How much were you paid for the

1 S. Trende

2 New York engagement?

3 A That one just about killed me.
4 It had like six or seven expert reports
5 in the end. And it was in the upper five
6 figures when everything added up but I
7 don't know the exact amount

8 Q The Maryland work, who was your,
9 with what party did you work on behalf of
10 in that case?

11 A So that case did have multiple
12 plaintiff's counsel. And I don't know
13 who -- the counsel I worked with, his
14 name is Strider Dickson. S-t-r-i-d-e-r
15 D-i-c-k-s-o-n.

16 He is with a, you know, I think
17 it would be a small firm on the national
18 level, probably a medium-sized firm on
19 the Maryland level. I don't recall the
20 name of it. But that's who I did all my
21 work with. I never met any of the
22 plaintiffs.

23 Q Did the plaintiffs have any
24 particular political affiliation in that
25 case?

1 S. Trende

2 A I don't remember. I never met
3 them so I don't know.

4 Q Do you know who was funding the
5 prosecution of that action?

6 A No, I don't.

7 Q You got paid by Strider
8 Dickson's firm; is that correct?

9 A I think so. They are the ones
10 who I submitted the invoices to.

11 Q Do you know whether the National
12 Republican Redistricting Trust was funding
13 your work in that case?

14 A I don't.

15 Q And how much were you paid on
16 the Maryland engagement?

17 A That one was around \$70,000.

18 Q Okay. The Kentucky work. Does
19 the Kentucky case concern Congressional
20 maps or state maps or both?

21 A It involved both.

22 Q Which party did you work on
23 behalf of in that matter?

24 A In that matter I worked directly
25 with the attorney general's office.

1 S. Trende

2 Q The attorney general, I believe
3 is David Cameron, right? Did I get the
4 name right?

5 A I think it's Daniel Cameron but
6 we will just call him Mr. Cameron.

7 Q General Cameron.

8 A General Cameron, right. Okay,
9 we'll be official.

10 Q And he is a Republican, right?

11 A That's correct.

12 Q And were you paid in that case
13 directly by the attorney general's office?

14 A Yes.

15 Q How much were you paid on that
16 engagement?

17 A I had a cap of about \$25,000 in
18 that case and I think I was pretty close
19 to it.

20 Q Okay. So I just wanted to make
21 sure I understand the work you have done
22 this cycle. In this cycle you provided
23 expert opinions in redistricting matters
24 in seven states?

25 A Yes. That's my count.

1 S. Trende

2 Q Do you --

3 A If we are excluding the Arizona
4 work and the Supreme Court of Virginia
5 work.

6 Q Yes. I mean those aren't
7 litigations, right? Those you were
8 appointed essentially as a consultant,
9 right? By the decision-making body,
10 right?

11 A Yeah. No litigation had been
12 brought in either of those matters and
13 the goal was to try to avoid litigation.

14 Q Okay. Do you have any kind of
15 arrangement with the National Republican
16 Redistricting Trust?

17 A No.

18 Q Or the Republican National
19 Committee?

20 A No.

21 Q Do you have any kind of
22 arrangement with the National Republican
23 Congressional Committee?

24 A No.

25 Q Like a preferred provider

1 S. Trende

2 arrangement, something like that?

3 A No.

4 Q A volume discount arrangement?

5 A I do not.

6 Q Okay. Now in addition to the
7 racial gerrymandering claim in this case,
8 are you aware that there's an Arlington
9 Heights claim in this case?

10 A I believe I have heard it from
11 some of the rebuttal reports that I read.

12 Q Are you familiar with Arlington
13 Heights?

14 A Yes.

15 Q Are you seeking to be certified
16 as an expert on the Arlington Heights
17 factors in this case?

18 A Well, again, that's something
19 that I think Mr. Gore has to decide. But
20 since I wasn't aware that the claim was
21 there until I read the rebuttal reports,
22 I would certainly be surprised if he
23 tried to tender me as an expert there.

24 Q Is it fair to say that you are
25 not opining on Arlington Heights factors

1 S. Trende

2 in this case?

3 A Certainly not directly. I don't
4 know if there's a way that the testimony
5 that I'm giving is relevant somehow to
6 the Arlington Heights factors. I mean I
7 guess maybe if you are -- there might be
8 a creative legal theory, right?

9 Like, if you are going with
10 traditional redistricting principles,
11 maybe that goes to the regularity of the
12 process followed. But, you know, I think
13 that would be creative.

14 Q You were not asked to opine on
15 Arlington Heights factors in any of your
16 reports, correct?

17 A That's correct.

18 Q You have, in fact, provided
19 expert analysis on Arlington Heights
20 factors before, correct?

21 A I believe that was in the
22 Feldman case.

23 Q Yeah, that's what I have seen.
24 Have you done Arlington Heights factors
25 analysis anywhere else?

1 S. Trende

2 A Not for a client. I believe
3 it's part of the syllabus for my
4 political participation and turnout
5 class. But I am actually not even 100
6 percent sure there.

7 Q Do you think you have got the
8 qualifications to do an Arlington Heights
9 factor analysis?

10 A Well, I did it in the Feldman
11 case. And even if the judge didn't find
12 the testimony particularly helpful it
13 wasn't struck. So, yes, I would assume I
14 have the qualifications to do so.

15 Q Okay. Is there a reason why you
16 didn't provide an Arlington Heights factor
17 analysis in this case?

18 A You would have to ask Mr. Gore.
19 I didn't even, like I said, I didn't know
20 it was a claim in this case until I read
21 the rebuttal reports.

22 Q Okay. Let me take a step back.
23 Did you examine the legislative record in
24 this case?

25 A I think I answered that earlier.

1 S. Trende

2 But the answer is no, I did not look at
3 the legislative record.

4 Q And is it fair to say you are
5 not opining on legislative intent in this
6 case?

7 A I think the analysis of
8 traditional redistricting principles and
9 the political effects of the maps goes to
10 questions of intent. That's typically
11 how those analyses are used in legal
12 cases.

13 But in the Arlington Heights
14 sense of examining the, you know, the
15 legislative history, what the traditions
16 are in the given state, no. I haven't
17 looked at that.

18 Q Are you planning to present an
19 analysis of racially polarized voting in
20 this case?

21 A I would be surprised if I were
22 asked to do that since I've done no
23 analysis of racially polarized voting in
24 South Carolina and have no intentions to
25 do so.

1 S. Trende

2 Q Do you consider yourself to be
3 an expert in the political geography of
4 South Carolina?

5 A You know, the legal, we are in a
6 legal proceeding. And the legal
7 definition of an expert is broad enough
8 that, yeah, I think I can give better
9 testimony about the political geography
10 of South Carolina than regular person on
11 the street.

12 So in the context of a legal
13 proceeding, yes. It's a state that I was
14 required to research when I co-authored
15 the Almanac of American Politics.

16 Obviously, the political
17 geography of it is extremely important in
18 presidential primary races. It's
19 important when it comes, you know, we had
20 a, well, what looked like it was going to
21 be a competitive Senate race in the 2020
22 cycle. So in that sense, I guess, sure.

23 Q Okay. In terms of, like, the
24 formal criteria to have you qualified as
25 an expert in South Carolina geography,

1 S. Trende

2 have you, do you have, has any court ever
3 found you to be an expert in South
4 Carolina political geography?

5 A No.

6 Q Has any -- what academic
7 training do you have in South Carolina
8 political geography?

9 A There certainly aren't courses
10 offered on South Carolina political
11 geography in the Ohio State political
12 science Ph.D. program; so I guess I
13 haven't taken any courses on it.

14 There are probably other aspects
15 of academic training, generally, that
16 would apply to evaluating South
17 Carolina's political geography but
18 nothing specific.

19 Q Have you taught on South
20 Carolina political geography in any of
21 your classes?

22 A Not that I can recall.

23 Q Have you published any articles
24 on South Carolina political geography?

25 A No. Not peer reviewed.

1 S. Trende

2 Q My question was broader than
3 that. But do you have non-peer reviewed
4 articles on South Carolina political
5 geography?

6 A I have written about it pretty
7 extensively on real clear politics.

8 Q Okay.

9 A And as I mentioned, South
10 Carolina, the South Carolina
11 Congressional Districts were one of my
12 assignments for the recent Almanac of
13 American Politics or the 2014 Almanac of
14 American politics.

15 Q When did you first discuss
16 becoming an expert in this case?

17 A I think it was shortly before my
18 deposition in the House case.

19 Q Who asked you?

20 A Mr. Gore -- let me rephrase
21 that. Because the previous question. My
22 deposition in the House case was
23 originally scheduled. And then that
24 matter went into settlement discussions.
25 And my deposition was continued. Or

1 S. Trende

2 postponed, I guess is the better term.

3 So it would have been before the
4 initial scheduled date, shortly before
5 the initial scheduled date of my
6 deposition in the House case.

7 Q And who asked you to serve?

8 A Mr. Gore.

9 Q Did you discuss whether to
10 become an expert in this case with anyone
11 else besides Mr. Gore?

12 A I usually ask my wife.

13 Q Anyone else?

14 A No.

15 Q Do you know if the defendants
16 asked other individuals to serve as
17 experts in this case?

18 A I don't know.

19 Q Do you know if anyone who was
20 asked to be an expert in this case
21 declined?

22 A I don't know.

23 Q Did you personally ask anyone
24 else to serve as an expert in this case?

25 A No.

1 S. Trende

2 Q With regard to any expert
3 testimony you have previously provided,
4 has any court ever excluded your testimony
5 for any reason?

6 A Yes.

7 Q Which cases or which case or
8 cases?

9 A So even though my understanding
10 of the rule is that you don't have to
11 note that, in your report, I try to note
12 that in the report whether I was excluded
13 or not. So it should, in case I missed
14 something in this response, everything
15 should be listed in the report.

16 With that caveat, in Feldman
17 versus Arizona, one of the attorneys
18 elicited some calculations for me, from
19 me, while I was on the witness stand.

20 And my understanding is that
21 after trial they were struck because it
22 was an undisclosed opinion that
23 plaintiffs did not have the opportunity
24 to provide a rebuttal for.

25 In NAACP v. Husted there was an

1 S. Trende

2 opinion that was struck because the judge
3 did not believe that the Internet map
4 drawing tool I used had been
5 double-checked enough to give sufficient
6 indicia of reliability.

7 And then I was struck, I was not
8 allowed to testify in the matter of Fair
9 Fight v. Raffensperger.

10 Q Any other matters where your
11 testimony has been excluded for any other
12 reason?

13 A As I said, I tried to include
14 them all in my expert report and if I
15 just overlooked something, I apologize.
16 But to to my recollection, those are the
17 three instances.

18 Q Okay. What did you do to
19 prepare for today's deposition?

20 A I read the rebuttal reports of
21 plaintiff experts. I had conversations
22 with Mr. Gore. And I reviewed the
23 documents that were provided to me as
24 potential exhibits.

25 Q Anything else?

1 S. Trende

2 A Not to my recollection.

3 Q Without going into the substance
4 of conversations you had with Mr. Gore,
5 how many times did you meet with Mr. Gore
6 to prepare for today's deposition?

7 A We met over Zoom twice.

8 Q When were those sessions?

9 A One was Monday morning and one
10 was Wednesday morning.

11 Q How long was each session?

12 A We had set aside an hour, I
13 believe and I think it ended up taking 30
14 minutes each.

15 Q Was anyone present besides Mr.
16 Gore and yourself during those
17 discussions?

18 A No.

19 Q Did you discuss today's
20 deposition with anyone else besides Mr.
21 Gore?

22 A Counsel in a matter for which I
23 had not been disclosed was informed that
24 I would be unavailable today because of
25 the deposition. But nothing of the

1 S. Trende

2 substance of this matter. And my wife.

3 Q Anyone else?

4 A No.

5 Q Did you review any deposition
6 transcripts to prepare for today's
7 deposition?

8 A I believe you have transcripts
9 in the materials you provided to me.

10 Q Yeah. I think there's a copy of
11 your transcript from the State House case.
12 Did you review that to prepare for today?

13 A If I did, I would have reviewed
14 it briefly. I certainly opened it up.

15 Q Did you review any other
16 transcripts to prepare, deposition
17 transcripts to prepare for today?

18 A I don't remember there being
19 anything else in the materials you
20 provided. So no, I wouldn't have
21 reviewed it.

22 Q Have you ever reviewed the
23 complaint in this matter?

24 A No.

25 Q Is there anything else you did

1 S. Trende

2 beyond what you have already discussed
3 that you did to prepare for today's
4 deposition?

5 A No.

6 Q If you could look at the report,
7 Exhibit 2, the Summary of Opinions. And
8 I'd like to start with your opinion, your
9 opinions on page 7.

10 You have a series of opinions
11 comparing the inactive map to the
12 benchmark plan. And just so our record is
13 clear, what are you referring to when you
14 refer to the enacted map?

15 A The enacted map or enacted plan
16 is referenced in the preceding paragraph
17 under Roman Numeral II.

18 And it's the new South Carolina
19 Congressional districts that were in
20 effect from or that will be going into
21 effect in the next 2022 election.

22 Q Okay. And what do you mean when
23 you refer to the benchmark plan?

24 A So again, that's referred to and
25 defined under Roman Numeral II; benchmark

1 S. Trende

2 plan refers to the previous map in effect
3 from 2012 to 2020.

4 Q Where did you you get the data
5 in your report that you present about the
6 enacted map?

7 A I likely would have gotten that
8 from redistricting data hub.

9 Q Where is that source?

10 A The Redistricting Data Hub is an
11 online repository of redistricting
12 materials collected by academics and
13 experts in the field. And that's relied
14 upon in redistricting matters.

15 We utilized it as a source for
16 matters for material in the Arizona
17 legislative case. And I have used it in
18 multiple matters since.

19 Q Where did you get the data
20 presented in your report about the
21 benchmark map?

22 A I believe it comes from the same
23 source.

24 Q So in these opinions you are
25 comparing the enacted plan to the

1 S. Trende

2 benchmark plan. Why is that? Why is that
3 the sole basis for comparison in your
4 report?

5 A Because it's what I was asked to
6 compare.

7 Q In rendering your opinions did
8 you consider any other plans besides the
9 enacted plan and the benchmark plan, the
10 enacted map and the benchmark plan?

11 A There's a history of maps prior
12 to the benchmark plan that are provided
13 in the report.

14 Q Well, for example, maybe my
15 question wasn't clear. In rendering your
16 opinions did you consider any of the other
17 plans that were submitted or considered
18 during the legislative process?

19 A So to make sure we are on the
20 same page, you are asking about
21 alternative plans to the plan that was
22 potentially enacted?

23 Q Yes. Did you consider any of
24 those alternatives?

25 A I did not.

1 S. Trende

2 Q For example, did you consider
3 any of the draft plans which the South
4 Carolina State House legislative staff
5 developed?

6 A I did not.

7 Q Did you consider, in particular
8 example, the House staff plan that was
9 released on December 13, 2021, are you
10 familiar with that plan?

11 A I am not.

12 Q Let me see if you have seen this
13 before.

14 MR. FREEDMAN: This is tab 24.1.
15 And we will produce it as Exhibit 7.

16 (Whereupon, Congressional House
17 Staff Map was marked as Exhibit 7 for
18 identification, as of this date.)

19 A Just to make sure we are on the
20 same page, this is labeled Cong. House
21 Staff Map and then Congressional House
22 Staff Plan when you open it?

23 Q Yes.

24 A Okay.

25 Q Had you seen this plan before it

1 S. Trende
2 was sent to you earlier this week?

3 A No.

4 Q Okay. I want to start with in
5 your summary of opinions, your third
6 opinion which is the second bullet on page
7 7. The one that says:

8 "The enacted map retains high
9 percentages of the cores of all of the
10 benchmark districts. Those percentages
11 range from 82.84 percent in District 1 to
12 99.96 percent in District 7. And five
13 districts retain more than 94 percent of
14 their cores."

15 What do you mean by core
16 retention?

17 A I believe it's specified later
18 in the map but it is the percentage of
19 the old district that is contained in the
20 new district. In terms of population.

21 Q And how did you assess the level
22 of core retention between the enacted map
23 and the benchmark plan?

24 A I believe I projected the
25 Congressional maps down to a shape file

1 S. Trende
2 of the blocks or how the blocks were
3 assigned. I believe this is all included
4 in the R code that I provided. R is just
5 the letter R.

6 After that so that, you know,
7 the shape file is basically a spreadsheet
8 with some special geographic data in the
9 file column.

10 But you create a line in the
11 shape file; you have the shape file of
12 the blocks with the populations. You
13 create a line in the shape file for each
14 of the blocks for what district they were
15 assigned to previously.

16 You create a line in the shape
17 file for each district they are assigned
18 to under the new map.

19 And then you can direct R to
20 look at the differences, you know, of the
21 total population in District 1, how much,
22 you take the total population of District
23 1, you take the total population of
24 District 1 where the old assignment
25 matches the new assignment. Divide them

1 S. Trende
2 and they give you percentages.

3 THE WITNESS: Is now an okay
4 time to take a break for five minutes?
5 My son just came home and is looking
6 for something.

7 THE VIDEOGRAPHER: The time is
8 11:50 and we are going off the record.
9 This is the end of media unit number
10 2.

11 (Recess taken: 11:50)

12 THE VIDEOGRAPHER: The time is
13 11:59 and we are back on the record.
14 This is the beginning of media unit
15 number 3.

16 Q Mr. Trende, when we were just
17 before the break I was asking you about
18 the, your Summary of Conclusion, the third
19 bullet regarding core retention. And I
20 guess another baseline question: What do
21 you consider to be a high core retention
22 percentage?

23 A Yeah. I read that in
24 Dr. Ragusa's report. And I guess any
25 time you use an adjective you open

1 S. Trende

2 yourself up for this line of inquiry.

3 And it's kind of like the question, when
4 does stubble become a beard? I don't
5 know exactly but I know that Rutherford
6 B. Hayes had a beard.

7 And I know that if 99.96 core
8 retention isn't high, then the word high
9 has no meaning. To me, 82.84 is also
10 high. But if someone wanted to quibble
11 about that, I suppose we could.

12 Q Your report emphasizes 94
13 percent. And is that, I mean should we
14 take that to mean that's what you consider
15 to be a high core retention percentage?

16 A No.

17 Q Are you aware of any
18 peer-reviewed literature that talks about
19 what a high core percentage, core
20 retention percentage is?

21 A No.

22 Q Is there any peer review
23 literature that you are aware of that sets
24 a standard for what a high core retention
25 rate is?

1 S. Trende

2 A No.

3 MR. FREEDMAN: If you could turn
4 to the document tabbed 32, and I will
5 introduce this as Exhibit 8.

6 (Whereupon, 2021 South Carolina
7 House Redistricting Guidelines was
8 marked as Exhibit 8 for
9 identification, as of this date.)

10 (Pause)

11 Q Have you seen this document
12 before?

13 A Yes.

14 Q What is it?

15 A It is the South Carolina House
16 of Representatives Judiciary Committee
17 Redistricting Ad Hoc Committee 2021
18 guidelines and criteria for Congressional
19 and legislative redistricting.

20 Q You had listed this in your list
21 of materials considered on page 7 as
22 something that you considered in rendering
23 the opinions in your report, correct?

24 A Yes.

25 Q What's your understanding of the

1 S. Trende

2 significance of the guidelines?

3 A My understanding is that they
4 were criteria set forth by the committee
5 to guide how the districts would be
6 drawn.

7 Q Is it fair to say that they are
8 the criteria that the South Carolina House
9 of Representatives would use in creating
10 the Congressional districts?

11 A I don't know if that's a perfect
12 rephrase of what I just said. I don't
13 know if they were intended to be an
14 exclusive list but they are certainly the
15 guidelines that they would use for
16 assessing redistricting efforts.

17 Q Do the House guidelines identify
18 core retention as a criteria that was to
19 be used in creating Congressional
20 districts?

21 A It's not specifically listed,
22 although that's certainly part of
23 incumbency consideration.

24 Q Does this document use the word
25 core?

1 S. Trende

2 A No. The word core is not
3 contained in the document.

4 Q Does the document use the word
5 retention?

6 A No, it does not use the word
7 retention.

8 Q In your report, we can go back
9 to your report. Your actual analysis on
10 this, let's just go down, it starts at
11 page 17. And at the bottom of page 17 let
12 me know when you are there.

13 (Pause)

14 A I'm here.

15 Q You write: "Table 2 gives the
16 core retention statistics for the State's
17 Congressional district."

18 First question, when you refer
19 to table 2 there, is that a typo, did you
20 mean to refer to table 3?

21 A Yes.

22 Q Okay. And then you go on to
23 write: "Core retention is identified in
24 this Court's decisions and the
25 redistricting guidelines promulgated by

1 S. Trende

2 the general assembly."

3 What are you referring to when
4 you refer to this Court's decisions?

5 A Probably the Colleton County in
6 Backus opinions.

7 Q Is there anything in Backus that
8 talks about core retention?

9 A I don't remember off the top of
10 my head.

11 Q Okay. If you could turn the
12 page to, let's talk about table 3 for a
13 bit. Table 3 is at the top of page 18 and
14 my first question is what is this table?

15 A This is a summary of the
16 population of districts that are retained
17 in the succeeding district with the same
18 number.

19 Q Okay. And what's it intended to
20 present?

21 A The population of districts that
22 are retained in the succeeding districts
23 with the same number.

24 Q You don't set a source for the
25 information presented in this table, do

1 S. Trende

2 you?

3 A No. It would be taken from the
4 shape files described above. And
5 processes in the R code that was
6 provided.

7 Q So just walk me through that.
8 Where is this, where are these numbers
9 coming from?

10 A They are taken from the shape
11 files from the Redistricting Data Hub
12 that have the census data for each block.
13 And then processed in R.

14 Q Okay. And what was the
15 processing that happened in R?

16 A I believe I described the
17 process before. But the process, as I
18 recall it, is to take the assignment of
19 each block to districts and create a
20 column that has the district.

21 Create another column that has
22 the old district which each block is
23 assigned. And then you can command R to
24 summarize the total population of each
25 district as it existed.

1 S. Trende

2 And then summarize the total
3 population of each district where the two
4 columns match. So where block 1 was
5 assigned block 1 in both maps.

6 And that tells you, that's, the
7 latter is your numerator. The former is
8 your denominator. And it tells you what
9 core population retention is.

10 Q Now, according to your table 3,
11 you are saying the core retention for
12 District 6 was 87.55 percent, right?

13 A The core population retention,
14 correct.

15 Q And you got the number from the
16 shape files and in processing it through R
17 in the way you just described, right?

18 A Correct.

19 Q And you are also saying that the
20 core population retention for District 1
21 is 82.84 percent, correct?

22 A Correct.

23 Q I want to show show you, if you
24 could turn to the document tab 27.

25 (Pause)

1 S. Trende

2 MR. FREEDMAN: And we will
3 introduce this as Exhibit 9.

4 (Whereupon, House Core
5 Constituency Analysis was marked as
6 Exhibit 9 for identification, as of
7 this date.)

8 Q Have you seen this document
9 before?

10 A Yes.

11 Q In what context?

12 A I believe it's available on the
13 website, the redistricting committee
14 website. And then when you provided it
15 during a couple of days ago.

16 Q Okay. Did you consider this in
17 rendering your opinions in this case?

18 A No.

19 Q If you scroll down to the second
20 page, I want to look at the, this is the
21 core just so the record is clear, this is
22 the core constituency's analysis that was
23 available on the House plan redistricting
24 website.

25 If you look at the analysis of

1 S. Trende

2 District 6, do you see that the fourth
3 line presents the core constituency
4 calculation for District 6?

5 A That's correct.

6 Q And this says that the core
7 constituency calculation for District 6 is
8 77.41 percent. Do you see that?

9 A Correct.

10 Q And you calculated the core
11 population retention for District 6 as
12 87.55 percent, right?

13 A Correct.

14 Q And you would agree that the
15 difference between 77.41 percent and 87.55
16 percent is a big number, right?

17 A It's about 10 percentage points.

18 Q For District 6 that corresponds
19 to about 75,000 people, right?

20 A 73,120.

21 Q So do you have any explanation
22 for why the House calculated the core
23 constituency for District 6 at 77.4
24 percent, I'm sorry, 77.41 percent; and you
25 calculated the core population retention

1 S. Trende

2 at 87.55 percent?

3 A Yes.

4 Q Okay, explain that to me.

5 A Well, there's a different way
6 that you can calculate it and that is
7 what the House did.

8 They are looking at the new
9 district, as you can see on each of these
10 pages, the total population of the
11 district, which is their denominator
12 731,203 or 731,204. That's a different
13 process than the process I described.

14 Which is taking the population
15 of the old district and seeing how much
16 of it stayed in the new district. My
17 denominator would be the population of
18 the old district.

19 Q Is there a reason why your way
20 of calculating the core population
21 retention rate is better than what the
22 House did?

23 A Not intrinsically. But --

24 Q This --

25 A But since District 6 had to gain

1 S. Trende

2 population, it's going to have a smaller
3 denominator.

4 Q The 77.41 percent calculation,
5 is a valid calculation of core
6 constituency, right?

7 A Right. But like I said, it's
8 not intrinsically better. It giveth and
9 it taketh away. If you look at the old
10 District 1 where the district had shed
11 population, it shows a much higher rate
12 of core retention than I had calculated.

13 So it really is just two
14 different ways of looking at the concept
15 of core retention.

16 Q Okay. Fair enough. Let's take
17 a look at how the Senate calculated it.
18 If you could turn to tab 30.

19 (Pause)

20 A Okay.

21 MR. FREEDMAN: And we will
22 introduce this as Exhibit 10. In a
23 second.

24 (Whereupon, Senate core
25 constituency analysis labeled tab

1 S. Trende

2 30 was marked as Exhibit 10 for
3 identification, as of this date.)

4 Q Exhibit 10 is the same analysis
5 of the enacted plan published on the
6 Senate website. Have you seen this
7 before?

8 A Yes.

9 Q And if you scroll down to page 2
10 and look at the core constituency for
11 District 6, you see that the Senate also
12 calculates the core constituency for
13 District 6 as 77.41 percent. Do you see
14 that?

15 A Yes.

16 Q The same as the House, right?

17 A Correct.

18 Q Going back to your table 3, you
19 didn't present in your core population
20 retention race demographic data. Correct?

21 A Correct.

22 Q You are not presenting how many
23 voters of a particular race stayed in the
24 district and how many got out of the
25 district, right?

1 S. Trende

2 A It is not in table 3, no.

3 Q Is there a reason why you didn't
4 present the racial demographics of your
5 core constituency analysis?

6 A No, because the table is core
7 population retention overall.

8 Q Did you analyze the racial
9 demographics of the core retention?

10 A I believe later on I looked at
11 the demographics of the precincts that
12 were moved back and forth. But not in
13 terms of racial core retention, no.

14 Q You didn't look at it on an
15 aggregated basis to see what the overall
16 retention for the district was, right?

17 A I believe that's correct.

18 Q Were you instructed not to look
19 at the racial demographics of the core
20 constituency --

21 A I was not.

22 Q -- done at this time? Just
23 looking at, we can stick with the Senate
24 analysis. We can talk about District 1,
25 since you raised that earlier.

1 S. Trende

2 You see that the Senate analyzes
3 and says that District 1 core retention
4 was 92.78 percent which is higher than
5 what you presented in tab, tab 3, right?

6 A Correct.

7 Q And if you go across the columns
8 do you see that it says, if you look at
9 the NHWHT column, which is non-Hispanic
10 whites, it says the percentage of white
11 persons who stayed in District 1 was 94.52
12 percent. Do you see that?

13 A That's correct.

14 Q And then you go over to the next
15 column, the NHDOJ black, it says the
16 percentage of black persons who stayed in
17 District 1 was 84.46 percent. Do you see
18 that?

19 A That's correct.

20 Q You can see from this chart that
21 20,240 black people were moved from
22 District 6 to District 1, right?

23 A Correct.

24 Q And if you scroll down to
25 District 6, if you look at the same column

1 S. Trende

2 you can see that 35,629 black people were
3 moved from District 1 to District 6,
4 right?

5 A Correct.

6 Q So the net migration of black
7 people from District 1 and District 6 was
8 15,389 black people were moved from
9 District 1 to District 6, right?

10 A I have no reason to dispute your
11 math on that.

12 Q And that's -- okay. Why don't
13 we in your report go down to table 4, same
14 page, page 18 that we were talking about.
15 And can you tell me what this table is?

16 A Table 4 is the population
17 movements by district, using from the
18 2012 to the 2022 lines.

19 Q Okay. And what's it intended to
20 present?

21 A It shows total population
22 movements from say District 1. It's best
23 read in rows. So for example, row 1
24 represents District 1. And you can read
25 across it. No people were moved from

1 S. Trende

2 District 1 to District 2. No people were
3 moved from District 1 to District 3 and
4 so forth.

5 Q And again, there's no source
6 cited for that data and its table, right?

7 A That's right. It's as I
8 suggested, at the opening of the report
9 in my deposition+the demographic data are
10 take from the Redistricting Data Hub.

11 Q Now the numbers in your chart if
12 you look back at Exhibit 10, that is set
13 at the core constituency, core analysis
14 the numbers in table 4 are consistent with
15 population shifts that are described in
16 the Senate's analysis, right?

17 A Um --

18 Q I can give you if that's too
19 broad, I can give you --

20 A I have no reason to dispute what
21 you say as I sit here.

22 Q Sir -- -

23 A I have spot checked District 6
24 and the numbers add up. So.

25 Q And if you look at District 1

1 S. Trende

2 the numbers also add up, right?

3 A I shouldn't say add up. They
4 match. Yes.

5 Q Okay. And you and your table 4
6 again don't present a racial demographic
7 analysis of the population shifts. Right?

8 A Correct.

9 Q And if you had presented the
10 racial demographic analysis, I'm sorry.
11 If you had presented this analysis with
12 racial demographics, as we can see in
13 Exhibit 10 and Exhibit 9, it would have
14 shown that there's a net exodus of 15,389
15 black people moved from District 1 to
16 District 6, right?

17 A Again, I don't have any reason
18 to dispute your precise math there.

19 Q Are you familiar with how close
20 recent elections have been in District 1?

21 A Yes.

22 Q They have been very close; is
23 that fair?

24 A Yes.

25 Q You note later in your report

1 S. Trende

2 that in the 2018 election the Democrat Joe
3 Cunningham received 3,982 more votes than
4 Katie Arrington. You're aware of that?

5 A I assume you're quoting fire
6 report correctly. That was a a very
7 close race.

8 Q And similarly in 2020
9 Representative Nancy Mace, the Republican,
10 received 5,415 more votes than Joe
11 Cunningham. That's also in your report,
12 right?

13 A Yes. And now I see the old
14 number, the previous number about
15 Arrington as well. Yes, I see the 5,415.

16 Q Just so the record is clear,
17 this is discussed on page 33 of your
18 report, right?

19 A That's correct.

20 Q What do you think the impact of
21 moving a net of 15,389 black people from
22 District 1 to District 6 will have on
23 Nancy Mace's reelection prospects?

24 A Well, African-American voters
25 are, generally, reliably Democratic

1 S. Trende

2 voters. It depends on the exact
3 constituency, somewhere in the realm of
4 90 percent Democratic voters. So it
5 would almost certainly help her.

6 Q Moving, you would agree that
7 moving 15,389 black people from District 1
8 to District 6 will make it more likely
9 that Nancy Mace is reelected?

10 A Right. But not in and of
11 itself; but given black voters tend to be
12 overwhelmingly Democratic, I would assume
13 that making that change, moving Democrats
14 to a different district would improve her
15 chances of reelection, yes.

16 We should also be clear that
17 that 15,000 number is total population,
18 not voters. But yes.

19 Q Or not persons eligible to vote?

20 A Right. There's the voting age
21 population. And then among that voting
22 age population, there's the -- yes,
23 there's a sub set of that voting age
24 population that isn't eligible and then a
25 subset of that population that doesn't

1 S. Trende

2 turn out to vote.

3 Q Right. If we were to look at
4 the voting age population, it would be
5 just some quick math here --

6 (Pause)

7 Q It would be over 10,000 black
8 individuals over the age of 18.

9 A I don't have a reason to dispute
10 your math.

11 Q Okay. Let's switch gears a
12 little bit. Going back to your summary of
13 opinions on page 7 of your report, I want
14 to look at the top vote on page 7, which
15 is your second thorough opinion.

16 "The enacted map generally
17 reflects only modest changes from the
18 benchmark plan which this Court upheld
19 against racial gerrymandering and other
20 challenges in Backus."

21 Let me start with what do you
22 mean when you say this Court upheld
23 against racial gerrymandering claims in
24 Backus?

25 A My understanding of Backus is

1 S. Trende

2 that it is a challenge to the 2012
3 Congressional lines which are the
4 benchmark plan. There was a 14th
5 Amendment racial gerrymandering claim
6 brought; I believe there was a section 2
7 claim as well.

8 Q Okay. Have you read Backus?

9 A I have.

10 Q Are you giving a legal
11 interpretation as to what Backus held?

12 A No. But it's my reading of the
13 case. Look, I practice law when I read a
14 case versus when Dr. Duchin reads a case;
15 there's no way I can completely filter
16 out my legal training.

17 But I wouldn't, I wouldn't mean
18 for my statements about things to have
19 any meaning beyond what a social
20 scientist would say about it.

21 Q Okay, fair enough. Do you know
22 whether the Backus plaintiffs challenged
23 the whole South Carolina Congressional Map
24 as a racial gerrymander or only in
25 particular districts?

1 S. Trende

2 A Well, that's a good question.
3 You know this is pre-Alabama legislative
4 caucus so they may well have challenged
5 the entire map. I don't know.

6 Q Let me see if I can refresh your
7 recollection. Let's --

8 MR. FREEDMAN: If you could take
9 a look at tab 37 which is a copy of
10 the Backus decision. And we will
11 introduce this as Exhibit 11.

12 (Whereupon, Backus decision was
13 marked as Exhibit 11 for
14 identification, as of this date.)

15 Q If you turn to the bottom of
16 page 8 and the top of page 9, which
17 concerns plaintiffs' proof of racial
18 gerrymandering.

19 It says: "Dr. Michael McDonald
20 opined at the the general assembly used
21 race as the predominant factor for in
22 drawing 20 House districts and the Sixth
23 Congressional district." Do you see that?

24 A Yes.

25 Q Do you have any reason to think

1 S. Trende

2 that the Backus plaintiffs challenged any
3 other district in the benchmark plan other
4 than the Sixth Congressional district as
5 racial gerrymandering?

6 A Well, if you go to page 6,
7 that's Dr. McDonald's analysis. Which
8 doesn't that necessarily say what the
9 legal theory was. I.

10 F you, I believe Dr. Ragusa does
11 an analysis of all the Congressional
12 district boundaries in this case, even
13 though to my understanding the challenge
14 is limited to 2, 5, 6, and 1.

15 If you go to the top on page, if
16 you go to page 6, it says under Roman
17 Numeral II: "Plaintiffs assert that the
18 House plan and Congressional plan that
19 violate the equal protection clause of
20 the 14th amendment."

21 Which read suggesting there was
22 a broader claim. But maybe not.

23 Q Right. Do you see anything else
24 this decision suggesting that plaintiffs
25 offered proof that any other district

1 S. Trende

2 besides the Sixth Congressional district
3 constituted gerrymandering in the Backus
4 case?

5 A I don't.

6 Q Now you would agree with me that
7 the Sixth Congressional District and the
8 enacted plan has at least 190,000
9 different people in the Sixth
10 Congressional district considering the
11 Backus decision, right?

12 A That's correct.

13 Q I mean we discussed earlier that
14 140,000 some people moved into District 6
15 from District 1. And 52,000 people moved
16 out of District 6 to District 1.

17 A Right. Correct.

18 Q And the core retention rate
19 between the Sixth Congressional District
20 considered in Backus and the Sixth
21 Congressional District plan is only 87.55
22 percent according to your analysis and
23 77.41 according to the House and Senate
24 analyses, right?

25 A Those are the correct numbers.

1 S. Trende

2 Q And those numbers are lower than
3 most of the other districts in the plan,
4 right?

5 A That's correct.

6 Q Okay. I want to turn to some of
7 your other analysis in this section of the
8 report and some of the maps you are
9 talking about.

10 If you could turn in your report
11 to Exhibit 2 to the bottom of page 10,
12 where you start your analysis preservation
13 of district cores.

14 (Pause)

15 A Witness complies)

16 Q And at the bottom of page 10 you
17 write: "Despite significant changes to
18 population, and the addition and
19 subtraction of districts, South Carolina's
20 district cores have remained surprisingly
21 consistent over the past century." Do you
22 see that?

23 A Yes.

24 Q I want to ask about some of the,
25 some of that analysis. So why don't we

1 S. Trende

2 start where you do historically with the
3 1902 map on page 10.

4 A Okay.

5 Q What's your purpose in
6 presenting this map?

7 A For me, I think it's interesting
8 historical context of the maps in South
9 Carolina. This isn't a state like
10 Maryland, where the districts have kind
11 of wandered all over the state as things
12 have been drawn over time.

13 Or a state like Ohio, where the
14 districts from 100 years ago would
15 largely be unrecognizable compared to
16 what we have today.

17 This is a state where if you
18 look back 100 years ago, the third
19 district was anchored around Anderson and
20 northwestern South Carolina.

21 And the Fourth District was
22 anchored in Greenville and Spartanburg.
23 You know, there are longstanding
24 commonalities in a lot of these
25 districts.

1 S. Trende

2 Q I wanted to ask about a couple
3 of pieces of your analysis when you are
4 talking about the historical maps going
5 back.

6 First thing is, one of the
7 observations you make is that this map in
8 the 1902 map has, as you write it, a
9 district that was anchored in Beaufort
10 County and the counties along the Georgia
11 border. What did you mean by that?

12 A Where are we?

13 Q I'm reading at the bottom of
14 page 10. About the map on page 11.

15 A I see. The second, is it
16 Beaufort or Beaufort? Whatever.
17 B-e-a-u-f-o-r-t is the population center
18 where the second went in the 1902
19 district went before stretching up along
20 the South Carolina/Georgia border, which
21 says now it's pretty rural.

22 Q And Beaufort County in the 1902
23 map was in a different Congressional
24 district than Charleston County, right?

25 A That's right.

1 S. Trende

2 Q And again, historically
3 speaking, if we go back a century the City
4 of Charleston was kept together in a
5 single Congressional district?

6 A That's correct.

7 Q As you write going back to the
8 early 1900s, the district, the first
9 district was anchored in Charleston,
10 right?

11 A That's correct.

12 Q Okay. I want to move forward to
13 the 1932 map. On page 12 of your report.
14 And my question is again, sort of based on
15 the question, what are you trying to
16 present with this map? What's your
17 purpose presenting this map?

18 A The same as before. To give
19 historical context how districts have
20 been drawn in South Carolina, as opposed
21 to a state like Maryland where they have
22 really wandered all over the place.

23 Or say, Ohio, where they would
24 be unrecognizable. Even like the old
25 Pennsylvania maps before then struck down

1 S. Trende

2 were, would be completely unrecognizable
3 to someone who time hopped from 1932 to
4 2011. And that's just not the case here.

5 Q And again looking at this map,
6 this is consistent with the last map. The
7 city of Charleston is kept together in a
8 single Congressional district, right?

9 A That's correct.

10 Q It's the center of District 1,
11 right?

12 A That's correct.

13 Q Now just, I want to make sure.
14 You have got, you know, two maps that are,
15 the first two maps presented here. I just
16 wanted to get your understanding as to the
17 basis of why they're relevant today. I
18 mean you are aware that the maps, the 1902
19 map, the 1932 map, are maps that were
20 adopted in the Jim Crow era?

21 A That's right.

22 Q And these maps were also adopted
23 before the equal population requirement
24 for Banker v. Carr, right?

25 A That's correct.

1 S. Trende

2 Q So considering those, would you
3 explain to me why you think the 1902 and
4 1932 maps are relevant to what we are
5 considering? What the Courts should be
6 considering?

7 A Because they give interesting
8 historical context to the way that maps
9 have been drawn in South Carolina
10 historically.

11 This isn't a state like
12 Maryland, where the lines have wandered
13 all over the state. Or a state like
14 Ohio, where the lines today would be
15 completely unrecognizable compared to the
16 very pretty lines we had and compact
17 lines we had before.

18 This isn't even a state like
19 Pennsylvania, where the 2011 map, you
20 know, was horrifyingly distorted compared
21 to the pre-Baker maps.

22 This is a map that the same
23 basic cores or bases have been intact
24 for, or have been similar for hundreds
25 of years. And I think that's

1 S. Trende

2 interesting context; perhaps the Court
3 will disagree.

4 Q Okay. Thank you. That was
5 helpful. So just moving forward in your
6 report, your next map you discuss is the
7 1982 map. I want to ask.

8 You don't include the first
9 Apush Court, Baker v. Carr map, the map
10 adopted in the early 1970s. Is there a
11 reason why that map wasn't included in
12 your report?

13 A I think there's at least two
14 maps. Because the first Baker map would
15 have been, everyone would have had to
16 redraw their lines I think, in 1966,
17 except for the single member states.

18 And it was just in the interest
19 of keeping things moving along.

20 Q Is there any reason to think
21 that those maps would show different, you
22 know, different alignment of the districts
23 than what we have otherwise been looking
24 at?

25 A I don't think they did. And

1 S. Trende

2 they certainly weren't excluded for any
3 reason, like any reason for that.

4 It was just kind of, okay, we
5 have established the longstanding
6 traditions. Let's get to what people
7 were mostly interested in, which is
8 what's happened in the last few decades.

9 Q Okay. Just so I'm -- did you
10 consider either the post-Baker v. Carr map
11 or the 1970 cycle map for purposes of
12 rendering the opinions in your report?

13 A I'm sure I created them. But I
14 wouldn't have relied upon them in doing
15 the map. If they were radically
16 different, to protect myself I probably
17 would have included them. To not get the
18 tag affixed of excluding them.

19 Honestly, my recollection is
20 that they were just excluded because as
21 you were getting at with the previous
22 line of questioning, what people were
23 probably most interested in is what has
24 happened in the last few decades.

25 Q Okay. We can turn to your 1982

1 S. Trende

2 map, which is on page 13 of your report.

3 (Pause)

4 Q Now the 1982 map, what's your
5 purpose in presenting this one?

6 A So it is the same as the
7 previous ones: To show some of the
8 continuities in the way maps have been
9 drawn. This isn't the state, where they
10 kind of use the etch a sketch and erase
11 it every 10 years and try to redraw the
12 districts.

13 This isn't someplace like Ohio
14 or Pennsylvania, or Maryland where you
15 just get something radically different
16 every couple of cycles. It's been kind
17 of the same story, obviously things have
18 to change. But you still get the same
19 basic story every cycle.

20 Q Okay. Is it fair to say the
21 1982 map like the other previous maps that
22 we looked at, the City of Charleston was
23 kept together in a single Congressional
24 district?

25 A You know, I can't tell from

1 S. Trende

2 eyeballing the area. But I am guessing
3 that it does look like it was.

4 Q Okay. Why don't we move forward
5 in 1992. Go to page 14 of your report.
6 The 1992 map.

7 (Pause)

8 Q Now what's your purpose in
9 showing the 1992 map?

10 A Well, I am showing the history
11 of these districts and how they have been
12 drawn. And obviously, there are some
13 significant differences in this 1992 map,
14 at least in the low country areas of
15 South Carolina.

16 You still have a district like,
17 that's in Anderson. You still have a
18 district you know, based on combining
19 Greenville and Spartanburg.

20 And one that's, now it would be
21 the Charlotte suburbs. I'm not sure it
22 was in 1992. Things get reconfigured,
23 obviously, In low country because that
24 6th District is transformed into an
25 ability to elect district.

1 S. Trende

2 I don't know for sure if the
3 Bush DOJ was pursuing this state. But I
4 know a lot of states in the 1992
5 redistricting cycle Bush DOJ was
6 pressuring them to draw more ability to
7 elect districts. So.

8 Q So just in terms of you know,
9 what this map does and how it's in
10 comparison to the 1982 map. This map
11 still keeps City of Charleston in District
12 1, right?

13 A Yes.

14 Q And --

15 A I should say it looks that way.
16 I can't tell if some of the 6th intrudes
17 into the City of Charleston.

18 Q And not like the 1982 map but
19 some of the earlier maps we saw, Beaufort
20 County is in a different district here
21 than Charleston, right?

22 A Yes.

23 Q So moving forward to the 2002
24 map, which is page 15 of your report.
25 This is the map that was evaluated and the

1 S. Trende

2 result of a Colleton County case, correct?

3 A That's right.

4 Q And this map, like some of the
5 other maps we've looked at, keeps the City
6 of Charleston together in the first
7 Congressional District. Do you see that?

8 A Again, I can't tell from this
9 whether the 6th takes in any of the
10 population of City of Charleston.

11 Q Okay. Well, like the 1992 map
12 and like the some of the historical maps
13 we were looking at, can you tell whether
14 Beaufort County and Charleston County are
15 in the same Congressional district in this
16 one?

17 A Beaufort and Charleston are not.

18 Q The observation you made
19 historically is about having a district
20 anchored in Beaufort County and the
21 counties along the Georgia border, that
22 applies to this map, the 2002 map?

23 A On this map, yeah. Beaufort is
24 kept separate and is combined up with
25 Columbia.

1 S. Trende

2 Q Okay. Turning to the 2012 map
3 on page 16, this is the map that was
4 evaluated in the Backus case, correct?

5 A That's correct.

6 Q And this map, like every map we
7 have looked at so far keeps the City of
8 Charleston together in the First
9 Congressional District, right?

10 A I think we have some nice
11 blowups elsewhere to be able to confirm
12 whether that protrusion from the -- and I
13 know the protrusion from the 6th goes
14 into Charleston County. I don't know
15 whether it goes into the City of
16 Charleston.

17 Q And you don't know one way or
18 the other whether City of Charleston was
19 split under the benchmark plan?

20 A I think we have the split data
21 for locales somewhere else; I don't know.

22 Q Okay. With regard to the
23 enacted plan and the analysis you present
24 at the bottom of page 16, you write that
25 the enacted plan makes only minor changes

1 S. Trende

2 to the benchmark plan.

3 And I think we have talked about
4 some of that. You in this analysis don't
5 note that the enacted plan splits the City
6 of Charleston between, out of the First
7 Congressional District?

8 A That's correct.

9 Q And your report also doesn't
10 discuss that there's a district as there
11 had been in the past, anchored in Beaufort
12 County and the counties along the Georgia
13 border.

14 A Which district is that?

15 Q Well, it looks to me that this
16 map actually splits Beaufort from the
17 counties along the Georgia border. Do you
18 see that?

19 A Yes.

20 Q Beaufort is in the First
21 Congressional District and the border
22 counties, and the Georgia border counties
23 look like they are both in 6th and some
24 are in 2. Do you see that?

25 A Yes.

1 S. Trende

2 Q When you opine that, and this is
3 going back to your overall summary
4 conclusion: That districts have been
5 surprisingly consistent, did you consider
6 the legislative record and whether
7 legislators understood that there were
8 significant changes between the enacted
9 plan and the benchmark map?

10 A I did not.

11 Q Okay.

12 MR. FREEDMAN: This would be a
13 still earlier than I expected but this
14 is are a good point to take a break
15 for lunch. So if we can go off, we
16 can talk about how long we should
17 take.

18 THE VIDEOGRAPHER: The time is
19 12:54 and we are going off the record.
20 This is the end of media unit number
21 3.

22 (Lunch recess taken: 12:54 p.m.)
23
24
25

Page 131

S. Trende

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

1 S. Trende

2 A F T E R N O O N S E S S I O N

3 1:35 p.m.

4

5 S E A N P A T R I C K T R E N D E ,

6 having been previously duly sworn,

7 testified further as follows:

8 CONTINUED EXAMINATION

9 BY MR. FREEDMAN:

10 THE VIDEOGRAPHER: The time is

11 1:35 and we are back on the record.

12 This is the beginning of media unit

13 number 4.

14 Q Welcome back, Mr. Trende. You

15 understand you are still under oath?

16 (No audio)

17 (Pause)

18 THE WITNESS: I don't know how

19 that happened.

20 Q I ask you the question again.

21 You understand you're still under oath?

22 A Yes.

23 Q Okay. We are switching gears a

24 little bit. Just so the record is clear,

25 you didn't compare the inactive map to

1 S. Trende

2 other maps that were considered during the
3 legislative process, correct?

4 A That's correct.

5 Q You had access to the House and
6 Senate redistricting websites, correct?

7 A That's correct.

8 Q And I want to go back to Exhibit
9 8, which is tab 24.1. The Congressional
10 House Staff Plan Map.

11 A Okay.

12 Q This is the map that the House
13 Redistricting Committee staff released on
14 December 13. And I think you testified
15 earlier you did not consider this in
16 forming your opinions in this case?

17 A That's correct.

18 Q Okay. Do you see that this map,
19 like the historical maps in your report,
20 keeps the City of Charleston in the First
21 Congressional District like the maps in
22 1902, 1932, 1972, I am sorry, 1982, 1992,
23 2002 and 2012?

24 A Assuming that's what happened,
25 in all those maps and there were a couple

1 S. Trende

2 of times I hedged. I do see that the
3 peninsula that Charleston sits on is in
4 the First.

5 Q And you can see that this map
6 has a district anchored in Beaufort
7 County, and the counties along the Georgia
8 border. And that district is different
9 than the Charleston District, like in some
10 of the historical maps discussed in your
11 report, right?

12 A Yes. Beaufort and the counties
13 along the Georgia border are kept
14 different than Charleston, separate from
15 Charleston.

16 Q And can you see that this map
17 keeps Sumter County together in one
18 district that's in the 6th?

19 A It puts Sumter together in one
20 district, yes.

21 Q And this map also keeps
22 Orangeburg together in one county,
23 together in the 6th. Do you see that?

24 A It puts Orangeburg together in
25 one county, yes.

1 S. Trende

2 Q Do you know how the compactness
3 of this map compares to the enacted map?

4 A No.

5 Q From eyeballing this, can you
6 tell me if District 1 is more compact in
7 the Congressional, is more compact in this
8 map --

9 (Pause)

10 Q From eyeballing this, can you
11 tell me whether the District 1 in this
12 map, the Congressional House staff plan
13 map is more compact than District 1 in the
14 enact map?

15 A I would guess something like
16 using something like REOCK, it is more
17 compact. Polsby-Popper is a
18 perimeter-based metric. So it's really
19 hard to tell from eyeballing it.

20 Q Thanks. And same question with
21 regard to District 6. Can you tell me
22 whether District 6 is more compact from
23 eyeballing it, more compact in the
24 Congressional House staff plan than in the
25 enacted plan?

1 S. Trende

2 A That I really can't.

3 Q Okay. In rendering your
4 opinions in this case did you consider any
5 of the racial demographic analysis that
6 was done of this map, the Congressional
7 House Staff Map?

8 A No, I didn't look at the
9 Congressional House staff plan at all.

10 Q Why don't you take a look at tab
11 26.

12 A Sure.

13 (Pause)

14 MR. FREEDMAN: Which I'll mark
15 as Exhibit 12.

16 (Whereupon, population summary
17 labeled Tab 26 was marked as Exhibit
18 12 for identification, as of this
19 date.)

20 Q Have you seen this document
21 before?

22 A I remember -- so I remember
23 seeing the population summaries online.
24 I don't know if I would have seen it from
25 the Cong House Staff Plan. I did open it

1 S. Trende

2 up to see the documents that you
3 provided.

4 Q Okay. Well, so this is a
5 document from the South Carolina House
6 Redistricting west side analyzing the
7 Congressional House staff plan map that we
8 have been discussing. Did you consider
9 this in forming your opinions in this
10 case?

11 A No, I didn't consider anything
12 from the House staff plan in forming my
13 opinions.

14 Q Okay. Do you see that this
15 table, this chart has information on seven
16 districts?

17 A Yes.

18 Q And do you understand that those
19 correspond to the seven South Carolina
20 Congressional Districts as proposed in the
21 House staff plan?

22 A That would be the natural read
23 of it, yes.

24 Q Are you familiar with the types
25 of information presented in this chart?

1 S. Trende

2 A Yes.

3 Q Like, do you have an
4 understanding what's a column "18 plus
5 pop" is? Do you have an understanding
6 what that is?

7 A I would interpret that to be the
8 voting age population.

9 Q Great. And looking across the
10 top row, do you see that the right most
11 column is labeled "percent NH18 plus, DOJ
12 BLK"? Do you see that?

13 A Yes.

14 Q Do you know what that means?

15 A That is the voting age
16 population, not Hispanic people,
17 conforming to the DOJ definition of
18 "black".

19 Q Are you familiar with the term
20 black voting age population, BVAP?

21 A Yes.

22 Q What is BVAP?

23 A Yeah. BVAP, well, if we are
24 just doing BVAP, it is the number of
25 black residents in a district or location

1 S. Trende

2 over the age of 18. You can express it.

3 A lot of times people use it for the
4 percent; BVAP is shorthand.

5 Q Okay. Do you have any
6 understanding whether any of the numbers
7 on this chart could correspond to BVAP or
8 percent BVAP?

9 A Well, using the DOJ definition
10 of black, the NH18 plus columns would be
11 BVAP.

12 Q Okay. If you look at the
13 right-most column, the BVAP column, do you
14 see that for District 1 it says that the
15 percent NH18 plus DOJ BLK is 20.27
16 percent?

17 A Yes.

18 Q And then moving more toward the
19 middle of the do you see a column labeled
20 "Percent H18 Percent Plus POP"?

21 A Yes.

22 Q Do you have an understanding
23 with a that column means?

24 A This is one I would want to
25 double-check against my own numbers to

1 S. Trende

2 ensure. But I would take that to be the
3 Hispanic population of voting age.

4 Q And you see for District 1 it's
5 5.48 percent from a Congressional staff
6 plan. Do you see that?

7 A Correct.

8 Q Okay. Now I want to turn back
9 to your report on page 22. This is
10 Exhibit 2. Page 22. Table 7.

11 A Okay.

12 Q And first question is what is
13 this, what is table 7?

14 A Table 7 is the percent BVAP, to
15 be consistent, I should have said
16 benchmark in enacted South Carolina
17 Districts. Boy, that would gotten me in
18 trouble at Kirkland & Ellis.

19 Q For you are referring to, so
20 just so the record is clear when you say
21 what the chart says, the table says, BVAP
22 old and that should say BVAP benchmark?

23 A Yeah.

24 Q And the column that says BVAP
25 New should be BVAP enacted plan or enacted

1 S. Trende

2 map, I'm sorry?

3 A That's right.

4 Q Now what's the source for the
5 data in this table?

6 A So again, it would be the shape
7 files described towards the beginning of
8 the report. It would have been processed
9 in R, according to the R code and data
10 sets that I provided to counsel.

11 Q Okay. And just so I want to
12 make sure I'm interpreting this right.
13 For District 1 you are saying the BVAP of
14 the benchmark plan was 16.6 percent.
15 Right?

16 A That's correct.

17 Q And the BVAP of the enacted map
18 was 17, I'm sorry, was 16.7 percent.

19 A That's correct.

20 Q Now you say that the difference
21 between those two is two tenths of a
22 percent. Should that be one 10th of a
23 percent or is there some kind of rounding
24 going on?

25 A I believe I looked at that one

1 S. Trende

2 when I was editing the report and it's a
3 rounding thing. So if it's 16.56 and
4 16.74, the difference is .18 which you
5 round up to .2 but each of the
6 individuals would round to .6 and .7, if
7 that makes sense.

8 Q Now on page 22 just below the
9 table, you say (Reading) District 1, and
10 then you mention three other districts,
11 see almost no changes in their racial
12 demographics.

13 When you wrote that did you
14 consider whether that was necessarily
15 going to be the case?

16 A I don't understand that
17 question.

18 Q Maybe the way I am putting it is
19 -- are you aware that the members of the
20 South Carolina Legislature considered maps
21 with higher BVAPs for District 1?

22 A Correct. I am now.

23 Q I mean, so the record is clear,
24 you are aware that the House redistricting
25 committee staff proposed a District 1 with

1 S. Trende

2 a BVAP of 2.72 percent -- I am sorry 20.27
3 percent? Correct?

4 A Again, I think that's been
5 established in this deposition.

6 Q Okay. Let's go back to your
7 summary of opinions on page 7. Okay. And
8 my questions are about fifth bullet. The
9 one that says: "The enacted plan's
10 districts compare favorably to the
11 benchmark plan's districts on four common
12 compactness measures."

13 What do you mean by compare
14 favorably?

15 A I think what I meant there was
16 that they were overall generally more
17 compact than the benchmark plan.

18 Q And what standard are you
19 applying when you are assessing
20 compactness in making that assessment?

21 A I was looking for compactness
22 measures, I believe. REOCK
23 Polsby-Popper. Inverse Schwartzberg and
24 Convex Hull.

25 Q Okay. Let's turn to page 20 of

1 S. Trende

2 your report, Exhibit 12. And my questions
3 are going to be about table 5. What is
4 table 5?

5 A So table 5 is the compactness
6 scores for the benchmark and enacted plan
7 for each of the individual districts
8 using the four metrics.

9 Q Okay. Where is the, what's the
10 data source for the information presented
11 in this table?

12 A Well, that just comes from the
13 shape files. REOCK scores aren't
14 something that you can really calculate
15 by hand. And so our process, the shape
16 files, and calculated the various scores.

17 Q So that's in the shape files
18 themselves or is that something R is
19 doing?

20 A So it's something R is doing. So
21 the REOCK score you imagine a circle that
22 just that bounds the district, that
23 touches the edges of the district but
24 never cuts the district.

25 And the REOCK score is basically

1 S. Trende

2 the percentage of the area of that
3 bounding circle that the district fills
4 up. That is not something, you know,
5 that's not something embedded in shape
6 files. And it's not something you can
7 with something like one of these
8 districts you can calculate by hand.

9 So it's based on the shape files
10 but not embedded in them. It has to be
11 calculated generally by computer.

12 Q Okay. And is it the case, I
13 just want to make sure I understand table
14 5. Is it the case that for each of the
15 four measures a larger number represents a
16 more compact district?

17 A That's correct.

18 Q So just so we are clear, for
19 like District 1, you are saying that for
20 all four compactness measures, enacted map
21 District 1 is more compact than the
22 benchmark plan District 1?

23 A That's correct.

24 Q And then for District 2, for,
25 under all four measures the enact map

1 S. Trende

2 District 2 is less compact than the
3 benchmark plan District 2?

4 A That's correct.

5 Q And for District 4, under all
6 four measures the enacted map District 4
7 is less compact than the benchmark plan
8 District 4?

9 A That's correct.

10 Q And for District 6 under all
11 four measures, the enact map District 6 is
12 less compact than the benchmark plan
13 District 6?

14 A That's correct.

15 Q And for the other three
16 districts, Districts 3, 5 and 7, they are
17 more compact under some measures and less
18 compact under other measures?

19 A That's correct.

20 Q Okay. So to summarize, under
21 all four measures District 1 is more
22 compact and Districts 2, 4 and 6 are less
23 compact?

24 A That's correct.

25 Q Okay. Let's switch gears, if

1 S. Trende

2 you want to turn back to your summary of
3 opinions on page 7?

4 Let's talk about the third
5 bullet: "The enact map reduces the number
6 of split counties from 12 in the benchmark
7 plan to 10 in the enacted plan."

8 Why do you emphasize the
9 reduction in number of county splits in
10 your analysis?

11 A Because I believe split counties
12 plus consideration, or two things. I
13 think one of the Court opinions mentions
14 totals for consideration of communities
15 of interest. And then I believe the
16 guidelines had something about splits.

17 Q I think you are right. I think
18 the Senate guidelines talk about
19 minimizing splits. I don't think I have
20 introduced that as an exhibit yet.

21 MR. FREEDMAN: So let me
22 introduce, this will be tab 33. And
23 we will introduce this as Exhibit 13.

24 (Whereupon, Tab 33, county
25 borders document was marked as Exhibit

1 S. Trende

2 13 for identification, as of this
3 date.)

4 Q If you look at the second page,
5 item 3C, in the second criteria says:

6 "Minimizing of county boundaries." Do you
7 see that?

8 A That's right.

9 Q With the 7 Congressional
10 District map, what's the smallest number
11 of county splits you would expect to see?

12 A Well, I don't know about expect
13 to see. But the theoretical minimum is
14 six.

15 Q I think we don't need to turn to
16 to it but you used the phrase realistic
17 number of county splits. Actually, that's
18 not fair to you. If you want to turn to
19 it, it's on page 10 of your report.

20 (Pause)

21 A Okay.

22 Q And you use in the paragraph on
23 respecting county municipal and precinct
24 boundaries. You use the phrase, this is
25 in the, it starts in the fourth line.

1 S. Trende

2 "Realistic minimum number of county
3 splits." What do you mean by realistic
4 minimum number of county splits?

5 A That's a funny story but. So
6 the, maybe you get lucky and you have a
7 combination of counties that add up to
8 exactly equal population criteria.

9 But that would be, like, I mean
10 that would be like lightning striking.
11 We came about 100 persons away from that
12 in our first Virginia draft. But you
13 just have to be insanely lucky to find
14 the combination of counties that add up
15 exactly to 731,204 people.

16 So realistically, every boundary
17 between, not paralyzed boundaries, but
18 every boundary between a sequential
19 number of districts has to split at least
20 one county. And so the number, the
21 realistic minimum number, theoretically
22 you could have zero splits if you just
23 shot the moon and everything worked out
24 right.

25 If we assume that there's no

1 S. Trende
2 combination of counties that adds up
3 exactly to the equal population
4 requirement, you'd have to have one fewer
5 of those, at least one fewer than the
6 number of districts for your county
7 splits.

8 Q Thank you. That was very
9 helpful.

10 MR. FREEDMAN: Could you turn to
11 Tab 25 in your binder. This is an --
12 I'll introduce it as Exhibit 14.

13 (Whereupon, House District
14 Report and staff plan labeled Tab 25
15 was marked as Exhibit 14 for
16 identification, as of this date.)

17 Q First question: And have you
18 seen this before?

19 A I probably opened it. Looking
20 for data on the House website. But
21 didn't examine it closely. And I opened
22 it when you provided me with the exhibits
23 for the deposition today.

24 Q Okay. This is a document from
25 the House web plan. It's what's called a

1 S. Trende

2 political subdivision split between
3 district report and this is the one that
4 corresponds to the Congressional House
5 Staff Plan.

6 First question is did you
7 consider this in rendering, reaching the
8 opinions, your opinions in this case?

9 A No.

10 Q Do you see at the top of the
11 first page there's an analysis or presents
12 numbers, number of subdivisions split into
13 more than one district. And it says
14 County eight. Do you see that?

15 A Yes.

16 Q Eight county splits is fewer
17 than in the enacted plan, right?

18 A That's correct.

19 Q Just looking at the Senate
20 criteria of minimizing county splits, the
21 Congressional the, House staff
22 Congressional plan does a better job than
23 the enacted plan on that criteria, right?

24 A Yes. It has fewer county splits
25 than the enacted plan.

1 S. Trende

2 Q And if you scroll down a little
3 bit on this chart, you can actually see
4 the counties that are split. And you'll
5 see that the Congressional House staff
6 plan has three county splits between
7 Districts 1 and 6. So you see Berkley
8 County, Charleston County, Dorchester
9 County?

10 A That's correct.

11 Q And you noted in your report
12 that the enact plan has District 1 and
13 District 6 splitting four counties between
14 them. Right? That's on page 10 of your
15 report?

16 A That's correct.

17 Q The enacted map split Colleton
18 and Jasper Counties when the Congressional
19 House staff plan did not, right?

20 A Wait. Can you say that again?

21 Q Yeah. The enacted map splits
22 Jasper, I am sorry. It splits, yeah,
23 Jasper and Colleton between 1 and 6,
24 right?

25 A Right. Well, I think that's

1 S. Trende

2 right.

3 Q And the enacted map splits
4 Sumter and Orangeburg Counties while the
5 Congressional House staff plan does not,
6 right?

7 A That's right.

8 Q Now your analysis of county
9 splits in your report on page 10 doesn't
10 go into, doesn't discuss the counties
11 which are split or remain split under the
12 enacted map, right?

13 A No. Here it's just a
14 calculation of the number of counties
15 that are split.

16 Q Did you consider in formulating
17 your opinions in this case whether the
18 split counties under the enacted map had
19 more black population than the state
20 average?

21 A No. Because I was just looking
22 at the total number of splits.

23 Q Did you consider whether black
24 eligible voters were disproportionately
25 more likely to be in split counties than

1 S. Trende

2 not split counties?

3 A No. Because again, I'm just
4 looking at whether the number of county
5 splits was increased or decreased here.

6 Q Okay. When your report talks
7 about Sumter County, this is on page 24,
8 if you want to check, you note that Sumter
9 County has black voting age population of
10 45.7 percent, right?

11 A Yes.

12 Q And that's well above the
13 average for the state, right?

14 A Yeah. I don't know the exact
15 BVAP for the state but it wouldn't be
16 45.7.

17 Q It would be lower than 45.7?

18 A Yeah. Let me -- well, yeah, it
19 would be lower than that.

20 Q And Sumter County is split in
21 the enacted map, right?

22 A Yeah. Both in the enacted map
23 and the benchmark.

24 Q And in your discussion, in your
25 report of Orangeburg County on page 26 you

1 S. Trende

2 note that Orangeburg County had black
3 voting age population of 59.9 percent.
4 That's on page 26 of your report, right?

5 A Yes.

6 Q And 59.9 percent BVAP is well
7 above the average BVAP for the state,
8 right?

9 A Yes.

10 Q And under the enacted map
11 Orangeburg County is split, correct?

12 A Under both the benchmark and
13 enacted plan it's split.

14 Q Okay. Let me shift gears again.
15 If you could turn in your report to page
16 23, my questions are about table 9. So
17 let me start with what is table 9?

18 A So table 9 shows the, it is
19 similar to the earlier presentation of
20 movement of population by district. From
21 the old lines to the new. The enacted,
22 the benchmark to the enacted.

23 So the First District doesn't
24 send any Biden voters to the 2nd. It
25 doesn't send any to the 3rd. It doesn't

1 S. Trende

2 send any to the 4th. Etcetera. It sends
3 10,808 to the 5th and so forth.

4 Q And what are you intending to
5 present in this analysis, what's the point
6 of this?

7 A It shows the move of voters
8 broken down by partisanship that most of
9 the changes are not significant. With
10 the 6th and the First you see a little
11 bit more change. The First sends 10,808
12 voters to the 6th. And then gets 3,342
13 Biden voters back from the 6th.

14 Q And what's the source of
15 information presented in this table?

16 A So this again would be taken
17 from the shape files, taken from the
18 Redistricting Data Hub and processed in
19 R.

20 Q How do you determine whether a
21 voter is a Biden voter for purposes of
22 this analysis?

23 A For most of it, it's easy.
24 Because we know how many votes were cast
25 for Joe Biden in subcounty data. And so

1 S. Trende

2 as BTD moves from Biden, from District 1
3 to District 6, you know exactly how many
4 Biden voters got moved.

5 It's a little trickier when you
6 are looking at split precincts. And the
7 common way to do it, I think I explained
8 this, maybe not.

9 Yeah, I explained this on page
10 8. You take the precincts and R will
11 match census blocks by geography to the
12 precincts. And since the census blocks
13 are allocated, are already allocated by
14 district where they were before, where
15 they were after redistricting, what you
16 do is you say, okay, let's say there's
17 100 votes cast for Joe Biden, and 200
18 residents in the census blocks match to
19 that precinct.

20 And one census block has 20
21 residents. Actually, it should be voting
22 age population. Has 20 residents over
23 the age of 18, so that's 10 percent of
24 the precinct. You would assign 10 Biden
25 votes to that census block. That's the

1 S. Trende

2 common way of doing it and it's all
3 processed in R.

4 Q Now the enacted map has, just
5 looking at the shift of Biden voters from
6 District 1 and District 6. The enacted
7 map had seven precincts that were split
8 between Districts 1 and 6, right?

9 A I don't have a reason to dispute
10 you on that.

11 Q Including -- let me, I don't
12 want to hide the ball.

13 MR. FREEDMAN: Why don't you
14 take a look at Tab 28.

15 (Pause)

16 A Okay.

17 MR. FREEDMAN: And we will
18 introduce this as Exhibit 15.

19 (Whereupon, House Redistricting
20 Report labeled Tab 28 was marked as
21 Exhibit 15 for identification, as of
22 this date.)

23 Q Have you seen this document
24 before?

25 A I have at least seen it in

1 S. Trende

2 opening, the date that you sent me I
3 probably would have opened it in the
4 process of reviewing materials for the
5 reports.

6 Q All right. Well, this is a
7 report from the House Redistricting
8 website which is a clinical subdivision
9 split for the enacted plan.

10 And if you see at the bottom of
11 the first page and top of the second page,
12 there's a list of precincts that are split
13 between the First and the 6th Districts.
14 Do you see that?

15 A I do.

16 Q It refers to Beech Hill to
17 B-e-e-c-h Hill II. Sorry Chris?
18 Delamars. D-e-l-a-m-a-r-s. Gibhans.
19 G-i-b-h-a-n-s, Gibhans II, Lincoln and
20 Windsor.

21 So sitting here can you tell us
22 how many voters in the Beech Hill II
23 District voted for Biden, stayed in the
24 First District as opposed to being shifted
25 to the 6th District?

1 S. Trende

2 A Not sitting here. But with the
3 processed R data that was produced I
4 could give you that answer. To a
5 reasonable degree of scientific certainty
6 using the methods typical of my field.

7 Q What's the standard of error in
8 that? I mean you, are not giving, let me
9 take a step back. You are not saying you
10 can tell us exactly which voters voted for
11 Biden, right?

12 (Inaudible)

13 Q You are not telling us that you
14 can tell us exactly which voters in the
15 split precincts voted for Biden, correct?

16 A That's right. In the post one
17 person one vote universe we never know
18 down to the person precisely what the
19 number of votes in a Congressional
20 District are for a given candidate.

21 With that said, lots of people
22 use the data to backfill what the, what
23 share a candidate got. So again, this is
24 using techniques, this is using
25 techniques that are standard for

1 S. Trende

2 aggregating and disaggregating data in
3 political science.

4 Q Is there a margin of error to
5 these estimates?

6 A There is not. This isn't
7 sampling. So there wouldn't be a precise
8 margin of error on it.

9 Q Is there a, do you have some
10 kind of confidence rule?

11 A Well, no, again. You are not
12 drawing a sample. So you wouldn't have a
13 confidence in a role. But that's not a
14 concept that would apply to this sort of
15 exercise.

16 Q Okay. If you look at the seven
17 precincts that are split between the First
18 and the 6th District, some of them are
19 quite large, aren't they?

20 A That's right.

21 Q Cypress is over 4,700 people.
22 Do you see that?

23 A That's right.

24 Q Beech Hill II is just over 2200
25 people?

1 S. Trende

2 A That's right.

3 Q Delamars is over 1,000 people?

4 A That's right.

5 Q Lincoln is over 3700 people?

6 A That's right.

7 Q There are almost 15,000 people
8 in the precincts that were split between
9 District 1 and District 6. And you can't
10 say with precision which ones were Biden
11 voters and which ones were Trump voters,
12 can you?

13 A No, you don't know for sure.
14 But again, this is the standard
15 technique. And as far as you are looking
16 for legislative intent, this is the type
17 of data that the legislature likely would
18 have been considering.

19 I don't know what's going on in
20 the fact development side of this case
21 but if you are looking at political
22 implications of redistricting, these are
23 the techniques that people use. It's the
24 standard techniques in my field.

25 Q So when you are saying in table

1 S. Trende

2 7 that there are 10,808 Biden voters moved
3 from District 1 to District 6. And 3,242
4 Biden voters who moved from district 6 to
5 District 1.

6 You can't tell us with precision
7 how many of the almost 15,000 people who
8 lived in the seven precincts that were
9 split between District 1 and District 6
10 for Biden voters, right?

11 A I can't say with absolute
12 confidence what they are. All I can say
13 is what would be revealed using, to a
14 reasonable degree of scientific
15 certainty, using the techniques that
16 everyone, to my knowledge, uses when
17 analyzing redistricting maps.

18 Q Okay. Let's shift gears a
19 little bit. In forming your opinions did
20 you consider any of the draft maps that
21 were submitted to legislative staff by the
22 National Republican Redistricting Trust?

23 A No. I didn't know that those
24 maps existed.

25 MR. FREEDMAN: Let me show you,

1 S. Trende

2 why don't you turn to Tab 34. We will
3 introduce it as 16.

4 (Whereupon, email Bates stamped
5 SC7000034244 labeled Tab 34 was marked
6 as Exhibit 16 for identification, as
7 of this date.)

8 MR. GORE: John, can you give us
9 that tab again?

10 MR. FREEDMAN: It's 34.

11 MR. GORE: Thank you.

12 Q So document 34 is the document
13 bearing the Bates range
14 SC-Senate-000034244. It's an email Andrew
15 Fiffick is forwarding to himself,
16 forwarding a November 15 email from Adam
17 Kincaid to Andrew Fiffick. Do you see
18 that?

19 A Yes.

20 Q Before getting the package of
21 emails, had you seen this email before?

22 A No.

23 Q I think you testified to this
24 before. Who is Adam Kincaid?

25 A He is someone involved with the

1 S. Trende

2 map drawing at the National Republican
3 Redistricting Trust.

4 Q And what in what capacity do you
5 know him?

6 A I believe he worked on the
7 remedial maps in New York and he has
8 contacted me about working in different
9 cases, asked if I was interested.

10 Q Have you actually worked with
11 him on any cases?

12 A Not directly. I know he lives
13 in, like I said, I believe he was
14 involved in the, some of the remedial
15 stuff in New York. He was involved in
16 Pennsylvania. But other than that, I
17 don't think he's ever popped up in any of
18 my cases.

19 Q Okay. Did the document that he
20 is forwarding here is something labeled "A
21 and B zip." Do you have any understanding
22 what that zip file is?

23 A No. I have never seen this
24 email until you sent it yesterday or the
25 day before when was it was.

1 S. Trende

2 Q Fair enough. Have you ever seen
3 the materials in the A and B zip file?

4 A I would be shocked. Like I
5 said, I didn't consider alternative maps,
6 I wasn't contacted by Adam Kincaid or
7 Andrew Fiffick in this matter. I have no
8 -- I mean you are asking me about a pig
9 in a poke, right?

10 I have no idea what A and B are.
11 But to my knowledge I don't, I've never
12 seen it. If it's one of the documents
13 you just showed me, then yeah, I have
14 seen it. But I don't know.

15 Q You don't know if you have seen
16 it?

17 A Yeah.

18 Q Okay.

19 MR. FREEDMAN: Let me just show
20 you, this will be the document tab 35.
21 We will introduce this as Exhibit 17.

22 (Whereupon, email dated 11/24/21
23 Bates stamped SC-Senate-00003245
24 labeled Tab 35 was marked as Exhibit
25 17 for identification, as of this

1 S. Trende

2 date.)

3 Q Same initial question: Before
4 getting the package of materials of
5 potential exhibits for your deposition had
6 you seen this document before?

7 A No.

8 Q This is, for the record, this is
9 exhibit 17 has the Bates number
10 SC-Senate-00003245. It's another email
11 that Andrew Fiffick is forwarding to
12 himself, forwarding an email from Adam
13 Kincaid, November 24, 2021.

14 The attachment to this document
15 is a zip file called Jessamine.
16 J-e-s-s-a-m-i-n-e. Have you ever seen the
17 files in the Jessamine file?

18 A Not to my knowledge.

19 Q Does the term Jessamine have any
20 significance to you?

21 A Yes.

22 Q What does it, what do you
23 understand to be?

24 A It's the county in Kentucky
25 where my wife's mother is from.

1 S. Trende

2 Q Good. All right. Let's switch
3 gears. I am switching gears again. Do
4 you need a quick break or you want to?

5 (Pause)

6 MR. FREEDMAN: Why don't we take
7 five.

8 THE WITNESS: Okay.

9 MR. FREEDMAN: And then I'll
10 hopefully be towards the home stretch.

11 THE VIDEOGRAPHER: The time is
12 2:27 and we are going off the record.
13 This is the end of media unit number
14 4.

15 (Recess taken: 2:25)

16 THE VIDEOGRAPHER: The time is
17 2:33 and we are back on the record.
18 This is the beginning of media unit
19 number 5.

20 Q Mr. Trende, if you could turn
21 to page 24 of your report, Exhibit 2. I
22 want to ask you about your analysis of
23 Sumter County. First question: Where did
24 this analysis come from?

25 A So again, it comes from the

1 S. Trende

2 shape files and the data described in the
3 opening section of the report and it
4 would have been processed in R.

5 Q Did any of the analysis you have
6 got here concerning Sumter County come
7 directly or indirectly from employees or
8 members of the South Carolina Legislature?

9 A No.

10 Q Looking at the map on page 24,
11 what is this map?

12 A So the black line represents the
13 old district lines and then the gray
14 shaded area shows the moved precincts or
15 portions of precincts that were shifted;
16 so you can see the new district lines by
17 following the contours of the gray shaded
18 areas.

19 Q Who came up with this map?

20 A I did.

21 Q Did you generate it yourself?

22 A Yes.

23 Q And did the data from this map
24 come from the share files?

25 A Yes.

1 S. Trende

2 Q You write at the top of page 25:
3 "Most of these residents live in precincts
4 that were split by the benchmark plan and
5 are made whole by the enacted plan."

6 And you were talking about the
7 10,000 some residents that were moved in
8 Sumter County.

9 When you say most of the
10 residents, can you tell me which residents
11 were moved between district 5 and District
12 6 that were not to repair splits, precinct
13 splits in the benchmark plan?

14 A No.

15 Q Are you referring to, if I
16 understood your analysis, your analysis
17 refers to particular precincts where
18 there's whole precincts were shifted. I
19 am referring to Wilder, Pocotlito I,
20 Pocotlito II and Swan Lake. Were those
21 precincts moved whole?

22 A I believe that's right.

23 Q Do you recall if there were any
24 other whole precincts that were moved
25 between Districts 5 and 6 in Sumter

1 S. Trende

2 County?

3 A I would have to look to see if
4 Turkey Creek. I think turkey Creek was
5 done. Let me, hold on. I can answer
6 that by looking -- well, I think Turkey
7 Creek did make a precinct whole. So
8 yeah, I think those were the whole
9 precincts that were moved.

10 Q Okay. Did you look -- strike
11 that. Did you consider the demographics,
12 the racial demographics of the four whole
13 precincts that were shifted between
14 Districts 5 and 6?

15 A No.

16 Q There was also at least one
17 district that remains split. I believe
18 you referred to the Birnie precinct.
19 Birnie. And do I -- let me strike that.
20 That's a bad question.

21 Is it, do I understand your
22 report correctly that the Birnie precinct
23 remained split under the benchmark plan?

24 A That's right. You always have
25 to have, just like you have to unless you

1 S. Trende

2 get super lucky. This has happened to me
3 twice where I have messed around and come
4 up with something that didn't have to
5 split up precincts.

6 But generally speaking, just
7 like you have to split a county at
8 district boundaries, you have to split at
9 least one precinct. And I think Bernie
10 is, I know Birnie is left split.

11 Q Were there any other precincts
12 that were split under the benchmark plan,
13 that remain split under the enacted plan?

14 A I don't know. I know we have
15 the summary statistics on that that will
16 tell us.

17 Q Yeah, I think the exhibit we
18 just were looking at indicates there were
19 not. So okay. In the second paragraph on
20 page 25, you attribute certain actions to
21 the map drawers. You use the term map
22 drawers. What do you mean by map drawers?

23 A Whoever drew this map.

24 Q Are you expressing an opinion
25 about the map drawers' intent when you are

1 S. Trende

2 referring to the map drawers?

3 A I don't think that could be
4 drawn from -- maybe you can draw an
5 inference as a legal argument. But all
6 this paragraph says is that map drawers
7 made South Liberty and Hampton Park
8 precincts whole.

9 So at least as I'm using it,
10 it's a, meant to be an objective
11 description of what happened.

12 Q I'm only asking because
13 elsewhere sort of in your descriptions you
14 are just describing the map differences
15 and you are not attributing things to
16 enactor of the map drawer.

17 So I'm just trying to get at,
18 are you making a claim here as to the map
19 drawer's intent with regard to that
20 particular point here?

21 A I'm not. I'm thinking I
22 probably just got bored of writing it the
23 same over and over again and in the
24 passive voice. So this time it's an
25 active voice. There's no particular

1 S. Trende

2 significance to including the term map
3 drawers there.

4 Q You are not, putting aside
5 questions of inferences from what was
6 actually drawn, you are not making claims
7 as to the map drawer's intent in drawing a
8 line through Sumter County, right?

9 A Right.

10 Q Okay. If you could turn to page
11 26, and the map there, what is this map?

12 A This is the Sumter area precinct
13 shaded by BVAP.

14 Q And what are you intending to
15 convey with this?

16 A I just thought it was, it would
17 be good not just to show the breakdown
18 by, you know, on a background screen but
19 also with the BVAP background I had
20 talked about.

21 The racial breakdown of
22 individuals in the procedure who were
23 moved to the preceding paragraphs. So
24 it's conveyed here. With all the
25 precincts in the area.

1 S. Trende

2 Q And did you generate this map
3 yourself?

4 A Yes.

5 Q And is the data that you used to
6 draw the map in from the shape files?

7 A Yes.

8 Q Okay. If we could turn to just
9 to the bottom of page 26, I want to turn
10 to your analysis of Orangeburg County. So
11 your Orangeburg County analysis page 26
12 continues on to 28. Where did the
13 analysis of Orangeburg County come from?

14 A Again it came from the shape
15 files using data processed in R.

16 Q Did any of the analysis in this
17 section come directly or indirectly from
18 the employees of the South Carolina
19 Legislature?

20 A No, it did not.

21 Q Now I had noticed when I was
22 going through your analysis here, you
23 don't make a claim with Orangeburg County
24 that you made for Sumter County that most
25 of the changes to the Orangeburg County

1 S. Trende

2 map were to make precinct splits by the
3 benchmark plan whole, right?

4 A I don't see that claim in here,
5 no.

6 Q And when you are talking in your
7 report about the specific shifts, this is
8 at the bottom of page 27, you are talking
9 about five precincts being changed. Do
10 you see that?

11 A Yes.

12 Q When you are referring to
13 Limestone I and II, those are whole
14 precincts that are being shifted to the
15 second district, correct?

16 A Yeah, that's correct. I guess I
17 could have used the line that most of
18 them were used to make precincts whole.
19 But yeah, I didn't include that, although
20 it does seem to be true.

21 Q Do you know what the population
22 of Limestone I and Limestone II are?

23 A I don't.

24 Q Do you know whether those two
25 precincts account for the majority of

1 S. Trende
2 population shift shifted between Districts
3 2 and District 6 in Orangeburg County?

4 A I don't.

5 Q Okay. You have a map on page
6 28. And I just want to ask: What is this
7 map and what are you trying to convey?

8 A So these are the precincts in
9 Orangeburg County or at least the area
10 around where there were population where
11 there were precincts shifted. The green
12 lines are the new district lines. The
13 black lines are the old district lines.

14 And it gives some sense of the
15 racial dispersion in the Orangeburg area,
16 especially since I have just been talking
17 about the BVAPs for the areas that were
18 moved.

19 Q Did you generate this map
20 yourself?

21 A Yes.

22 Q And did the data come from the
23 shape files again?

24 A Yes.

25 Q Let's turn to your analysis of

1 S. Trende

2 Richland County, which starts at the
3 bottom of page 28 and goes through midway
4 through page 32. So where did this
5 analysis come from?

6 A It's the same answer as above.
7 It was data that was listed in the
8 opening, processed in R using the code
9 that was provided to Counsel.

10 Q Did any of this analysis come
11 directly or indirectly from employees or
12 members of the South Carolina Legislature?

13 A No.

14 Q Turning to your map on page 29,
15 what is this map?

16 A It's on page 29?

17 Q Yes, page 29.

18 A That is the Richland area
19 precincts coded by Biden Trump vote share
20 with the green lines reflecting the new
21 district lines and the black lines
22 reflecting the old district lines.

23 Q And what is this intended to
24 convey?

25 A I don't know that I discussed

1 S. Trende

2 the politics of these changes at all.

3 Well, I mean if you look at it you can
4 tell that the precincts that are shifted
5 into the 6th are blue.

6 But beyond that, I think it
7 might be just an overlay of the political
8 contours of Richland County.

9 Q Okay. Did you generate this map
10 yourself?

11 A I did.

12 Q And is the data in this map all
13 from the share files?

14 A It's all from the share files
15 and processed by the R code that I
16 shared.

17 Q Okay. If you could turn to the
18 map on page 30, what is this map?

19 A So this is another variation of
20 the maps that I have included previously,
21 that shows the precincts or portions of
22 precincts that are moved. With the old
23 district lines shaded in black. So it
24 gives you a way of seeing what moved into
25 and what moved out of the old district

1 S. Trende

2 lines.

3 Q And what are you intending to
4 convey with this?

5 A Give better insight into the
6 physical geography of what was moved.

7 Q Okay. And did you generate this
8 map yourself?

9 A I did.

10 Q And did the data come from the
11 share files?

12 A It did and it was processed in
13 the R files that were provided to
14 Counsel.

15 Q Okay. I want to, if we could
16 shift back to that bottom of page 29. You
17 write that "the changes to the lines here
18 mostly make precincts whole or add
19 Democratic-leaning voters to the 6th
20 District." Do you see that?

21 A Yes.

22 Q You say again that the changes
23 are mostly to make precincts whole. Or to
24 add Democratic-leaning votes. Which
25 changes were not to make precincts whole?

1 S. Trende

2 A I think they all either to make
3 precincts whole or move
4 Democratic-leaning voters, move
5 Democratic-leaning portions of precincts
6 into the 6th. As for what precincts were
7 not made whole, that should be in the
8 summary files.

9 Q Okay. Just reading your text,
10 at the bottom of page 30, you note that to
11 the north of Fort Jackson, midway precinct
12 is shifted. Is that a whole precinct
13 shift?

14 A I don't know. Off the top of
15 my head. I believe it is. I believe the
16 two precincts, both that and Briarwood --
17 no. Briarwood is made whole. I think
18 Midway isn't.

19 So if you look at the map, like,
20 if you made Briarwood whole there would
21 be weird indention, indentation without
22 adding Midway. So that's one of the
23 things that this map could be useful for.

24 Q Okay. You also note when you
25 are discussing Spring Valley, a portion of

1 S. Trende

2 Spring Valley District is all added to the
3 precinct. Is it the case that Spring
4 Valley remains split under the enacted
5 map?

6 A Again, we would have to check.
7 That should be, I know they produced the
8 file that lists the split precincts. So
9 it might be.

10 Q Sitting here today you can't say
11 for sure?

12 A Not without looking at the
13 summary file to see what the, I think
14 there was only like 13 left. So we could
15 check that. But.

16 Q Okay. Now at the top of the
17 page 31, the first full paragraph, you are
18 talking more about the area of western
19 downtown Columbia.

20 And you say nine of the shifts
21 from the 2nd to the 6th District were to
22 make precincts or wards whole. Do you
23 know how many total shifts there were in
24 the west of the downtown Columbia?

25 A So first off, you asked me, you

1 S. Trende

2 characterized it as saying nine shifts
3 were to make precincts or wards whole.
4 And I wasn't attributing intent. I just
5 said that that's the outcome of it. But
6 to get to the nut of the question, no, I
7 don't know how many whole precincts were
8 shifted.

9 Q So you don't know how many of
10 the shifts west of downtown Columbia were
11 to make or were not to make precincts
12 whole?

13 A I don't know how many were not
14 to make precincts whole, no.

15 Q If you could turn to page 32 of
16 the map. What is this map?

17 A This is the same, a variation of
18 the map we have seen before with the old
19 and new district lines superimposed over
20 the district, the precincts, shaded by
21 BVAP.

22 Q And what is it intended to
23 convey?

24 A I think it's a useful
25 illustration of the racial geography of

1 S. Trende

2 the Richland area and how the districts
3 are drawn. I don't know how Counsel
4 might intend to use it.

5 Q Did you generate this map
6 yourself?

7 A I did.

8 Q And it's based entirely on share
9 file data?

10 A That's right. And processed in
11 R.

12 Q Let's turn to your analysis of
13 the Charleston area, which is pages 32 to
14 bottom of page 32, through page 35 in your
15 report.

16 A Okay.

17 Q Where did this analysis come
18 from?

19 A This analysis is my -- oh. I
20 don't understand the question.

21 Q Did any of this analysis come
22 directly or indirectly from employees or
23 members of the South Carolina Legislature?

24 A No.

25 Q There's a map on page 34. What

1 S. Trende

2 is this map?

3 A So this is a variant on the maps
4 that we've seen time and again at this
5 point that shows which precincts moved
6 between the two districts in the
7 Charleston area.

8 Q Now --

9 A I'm sorry. I didn't include the
10 labels on it. Because there's a bunch of
11 them and it was disastrous.

12 Q Too busy?

13 A Too busy. Useless.

14 Q Did you generate this map
15 yourself?

16 A I did.

17 Q And did the data used to
18 generate come from share files?

19 A Yeah.

20 Q Shape files. I am saying share
21 files. I mean shape files?

22 A Yes. The same shape files that
23 we discussed before with the R codes that
24 we previously discussed.

25 Q Now I want to ask a little bit

1 S. Trende

2 about your narrative. Your, if you turn
3 back to page 33, your personal paragraph,
4 you write starting in the second sentence:
5 "The shedding was done in a way that
6 improves Republican prospects in the
7 district."

8 Are you aware of anything in the
9 legislative record where improving
10 Republican prospects in the First District
11 was cited as a basis for the changes?

12 A So in the Senate redistricting
13 guidelines, well, I didn't read the
14 legislative record as I have stated. But
15 in the Senate redistricting guidelines
16 there's a reference to political interest
17 common to the area population for
18 redistricting communities of interest.

19 And there is something in, the
20 -- oh. So incumbency consideration is in
21 the House files. And obviously Nancy
22 Mace is a Republican incumbent. I think
23 there's something else, maybe not, in the
24 House guidelines that refer to politics.

25 Q But you are not aware of

1 S. Trende

2 anything coming up in the, anybody saying
3 in the legislature, the dates, that the
4 population shifts from the First District
5 to improve Republican prospects in the
6 districts, agreed?

7 A Oh, no. I haven't read the
8 legislative records. I just said it's
9 done in such a way as to improves
10 Republican prospects.

11 Q Okay. Now in your analysis of
12 the Charleston area, unlike your analysis
13 of Sumter and Richland County, you are not
14 making the claim that shifts in Charleston
15 County were to make the precincts whole?

16 A Oh. And just for the record, I
17 am getting a lot of thunder in the
18 background. But --

19 (Pause)

20 (Discussion off the record)

21 A And so now I don't remember --

22 Q Okay. My sound just went out
23 for you.

24 A Oh, you can't hear me? Can you
25 hear me now?

1 S. Trende

2 Q Yes. If you could repeat your
3 answer, that would be great.

4 A I apologize. So, no, I'm not
5 describing precincts being made whole
6 on -- -

7 (Inaudible)

8 (Discussion off the record)

9 MR. FREEDMAN: Can we go off
10 because we're getting some feedback.

11 THE VIDEOGRAPHER: The time is 3
12 p.m. and we are going off the record.

13 (Off the record: 3:00)

14 THE VIDEOGRAPHER: The time is
15 3:01 and we are back on the record.

16 Q Okay. On page 33 and it carries
17 over to page 34, you make a series of
18 statements about the map drawers making
19 Berkeley County Hall, making Beaufort
20 County Hall --

21 (Inaudible)

22 Q Making Berkeley County Hall,
23 making Beaufort County Hall. And
24 splitting Charleston, Dorchester and
25 Jasper Counties, right?

1 S. Trende

2 A Yes. Those are all things
3 stated in the report.

4 Q Now again, consistent with my
5 earlier question, you are not making, you
6 are not expressing an opinion about the
7 map drawer's intent, correct?

8 A Right. I don't know what that
9 discovery is going to show or what
10 inferences Counsel may try to draw. But
11 for purposes of this report, I'm just
12 trying to describe the changes that were
13 made.

14 Q Now there's also discussion on
15 page 34 that "changes to District 1 and 6
16 bring the district line into conformity
17 with natural geographic boundaries."

18 What was your source of
19 information for this paragraph?

20 A Looking at the map.

21 Q Do you have any expertise in the
22 political geography of Charleston County?

23 A I don't think I'm saying
24 anything about communities of interest in
25 Charleston County. I'm just talking

1 S. Trende

2 about boundaries and I know how to read a
3 peninsula.

4 Q So just so I'm clear, what is
5 your basis for being able to speak about
6 the natural geography of the Cooper River,
7 Charleston Harbor, Stoner River Wappo
8 Creek and Wadmalaw River?

9 A Being able to look at a map and
10 see whether precinct boundaries follow a
11 river really doesn't require a particular
12 understanding or framing.

13 Q You also don't suggest anywhere
14 else in your report that lines are being
15 drawn to bring districts into conformity
16 with natural geographic boundaries, do
17 you?

18 A I think there's something in the
19 discussion of Orangeburg where I mention
20 that Limestone, where the Limestone 1 and
21 2 were the only precincts in the area,
22 let's see. Limestone 1 and 2 are the
23 only precincts in the area not also
24 contained at least partially within the
25 Orangeburg city boundaries are assigned

1 S. Trende

2 to the 2nd District. That talks about
3 geographic boundaries.

4 Q Are natural geographic
5 boundaries a criteria under the Senate or
6 House guidelines?

7 A I don't know as I sit here.

8 Q Okay. Earlier in your report,
9 much earlier today we talked about the
10 language in your report that the District
11 1 core had remained surprisingly
12 consistent over the past century.

13 Is it your opinion that for the
14 last hundred years the boundary of
15 District 1 violated natural geographic
16 boundaries?

17 A I don't think the point of
18 comparison is where things were 100 years
19 ago. I think the point of, I don't think
20 there's even a point of comparison.

21 It's brought into the, it
22 follows boundary lines now. Things like
23 Charleston Peninsula are kept intact. So
24 if anything, there's a point of reference
25 with the previous map, not this one.

1 S. Trende

2 Q Well, okay. Did the benchmark
3 map use the Cooper River, Charleston
4 Harbor, the Stoner River, Wappo Creek or
5 Wadmalaw River and its natural boundaries
6 to split District 1 from District 6?

7 A I don't recall as I sit here.

8 Q Did the 2002 map use the Cooper
9 River, Charleston Harbor or stoner river
10 Wappo Creek or Wadmalaw River as natural
11 geographic boundaries to split District 1
12 from District 6?

13 A (Response inaudible)

14 (Pause)

15 THE WITNESS: Did you get that
16 answer?

17 MR. FREEDMAN: No.

18 A I said I don't know as I sit
19 here.

20 Q Same question for the 1992 map.

21 A I don't know as I sit here.

22 Q And same question for the 1982
23 map?

24 A I think 198 -- hold on. I don't
25 know as I sit here.

1 S. Trende

2 Q What about for the 1932 map?

3 A It wouldn't follow those
4 boundaries because the entire county is
5 in the same district.

6 Q And the same question for the
7 1902 map?

8 A Again, it wouldn't follow those
9 boundaries because the entire county is
10 in the same district. So none of those
11 boundaries would have been violated.

12 Q Now unlike your analysis of
13 Sumter, Orangeburg and Richland Counties,
14 for Charleston County you didn't present a
15 map showing the BVAP of precincts that
16 shifted, right?

17 A That's right.

18 Q Why didn't you include a BVAP
19 map for Charleston County?

20 A I think I was running out of
21 time at this point. I didn't include a
22 political map either, even though most of
23 the discussion is about politics.

24 Q Did you prepare a BVAP map for
25 Charleston County and just decide not to

1 S. Trende

2 include it?

3 A I don't believe so.

4 Q Did you consider the BVAP of the
5 precincts that were shifted between
6 District 1 and District 6?

7 A I think on the, on page 35 I
8 discuss it.

9 Q Okay. I'm going to shift gears
10 and to your rebuttal report.

11 MR. FREEDMAN: You want to keep
12 going or you want to take a quick
13 break?

14 THE WITNESS: You say the end is
15 in sight. Is that like another full
16 segment or is that like if we go
17 another half hour we will be done?

18 MR. FREEDMAN: It's a segment.
19 My segments tend to go a half -- let's
20 go off for a second.

21 THE WITNESS: All right.

22 THE VIDEOGRAPHER: The time is
23 3:10 and we are going off the record.
24 This is the end of media unit number
25 5.

1 S. Trende

2 (Recess taken: 3:10)

3 THE VIDEOGRAPHER: The time is
4 3:16 and we are back on the record.
5 This is the beginning of media unit
6 number 6.

7 Q Mr. Trende, I want to turn to
8 your rebuttal report, which is if you need
9 it, is tab 3 in the materials and it's
10 previously marked as Exhibit 3.

11 Why don't we start with your
12 analysis of Dr. Ragusa on page 8. So
13 first question is is the analysis on page
14 8 through 11 a complete and full statement
15 of the opinions you intend to offer at
16 trial concerning Dr. Ragusa?

17 A I don't know what Counsel plans
18 to ask me but yes, this is what I see
19 myself testifying to at trial.

20 Q You don't plan to express any
21 opinions at trial about Dr. Ragusa beyond
22 those set forth in this rebuttal report,
23 correct?

24 A Certainly not to his initial
25 report. I don't have any intention to

1 S. Trende

2 give other responds either.

3 Q Okay. Have you reviewed Dr.
4 Ragusa's February 10, 2022 or June 28,
5 2022 depositions in this case?

6 A No.

7 Q Do you plan to?

8 A Now that you ask me, I might
9 because it actually sounds interesting
10 but no, I don't think I could bill that
11 so I probably won't.

12 Q At page 8 you start to outline
13 your criticisms of Dr. Ragusa and you
14 write that his three tests have the same
15 infirmities and the first infirmity is:

16 "The predictor variable is the
17 count of black residents of voting age in
18 a precinct rather than the percentage of
19 black residents of voting age in the
20 precinct." What do you mean by that?

21 A It's laid out in the succeeding
22 sentences but, you know, his independent
23 variable or his response as whether the
24 district, whether the precinct moves
25 between districts, we will just summarize

1 S. Trende

2 it. Can I summarize his three analyses
3 as to whether or not the precinct moves
4 and we will know what we are talking
5 about?

6 Q Yes.

7 A So it's an dichotomous response,
8 right? Does it move or does it not. And
9 what he is using to try to predict is how
10 many black residents there are in the
11 precinct of voting age.

12 But when you are looking at the
13 effect on the racial composition of the
14 districts, it matters greatly whether
15 there are 500 total residents or 5,000
16 total residents. Or 10.

17 If you have a district that's 25
18 percent black and you take a precinct
19 with five black residents and 10 total
20 residents of voting age and move them
21 over, you have marginally increased the
22 voting age population, the BVAP percent
23 of that district.

24 If you take some district with
25 five black people and 10,000 total

1 S. Trende

2 residents of voting age, you have made a
3 more substantial decrease in the voting
4 age population in the recipient district.

5 Q So is it your position that Dr.
6 Ragusa didn't control for precinct size?

7 A He does but not in the way you
8 would typically do it. I know one of his
9 predictors is precinct size. But to do
10 it properly, you know, when you are
11 trying to convert to a rate you typically
12 use, like, an offset term where you lock
13 in the co-efficient of the size predictor
14 at 1.

15 It would have been cleaner if he
16 would just use percentages and I have no
17 idea why he doesn't do that.

18 Q Do you remember in your report
19 about Dr. Ragusa's report in the State
20 House case, what your criticism of him
21 there was?

22 A I believe I made the same
23 criticism.

24 Q You don't recall criticizing him
25 for using BVAP percentage only and not

1 S. Trende
2 controlling for precinct size?

3 A I thought it was the other way
4 around, that he, I thought he used counts
5 there as well.

6 Q Okay. Turning to your next
7 observation. You say that Dr. Ragusa
8 failed to control for the myriad of
9 traditional redistricting criteria.

10 And you say that: "He failed to
11 control for things like core retention,
12 reducing precincts splits, preserving
13 communities of interest or keeping
14 municipalities or counties intact."
15 What do you mean by that?

16 A Again, I think that's set out in
17 the succeeding sentences. It doesn't
18 make a lot of sense to ask why a precinct
19 in Lexington County is kept in District
20 2, while a precinct in Richland County is
21 taken out, because there's other
22 considerations, like Lexington County has
23 been intact in District 2 for 100 years
24 while Richland County is not.

25 There may be -- in other words,

1 S. Trende

2 there may be other reasons that are
3 legitimate that districts or precincts
4 are kept in that correlate with race or
5 kept out; and he doesn't control for that
6 possibility.

7 Q So what's your basis for saying
8 that he is not controlling for that
9 possibility?

10 A Because his controls as I
11 understand them are population, race and
12 politics.

13 Q Have you examined his regression
14 analysis?

15 A Yes.

16 Q And what's your basis for saying
17 his regression analysis didn't control for
18 keeping counties whole?

19 A Because he doesn't. His
20 controls are race politics and population
21 size.

22 Q You write on page 9 that "Dr.
23 Ragusa did not insert contiguity and that
24 the concept of a county envelope treats
25 all precincts within a county equally."

1 S. Trende

2 What's your basis for saying that?

3 A Again, having looked at his
4 regression and his data, the question is
5 whether a precinct goes into, is kept in
6 the district or is kept out of the
7 district, without at least as I read his
8 regression analyses, without any
9 reference to whether they happen to be
10 adjacent on the county boundary.

11 It's the county envelope which
12 considers all the precincts in the county
13 or in the district. Not just those that
14 exist on the boundary of the district.

15 Q Are you aware of any peer review
16 or academic literature that says the
17 county envelope is invalid because it
18 treats all precincts within the county
19 equally?

20 A I am not one way or the other.
21 But I think for purposes of using this,
22 an actual case, it's pretty obvious that
23 the decision to keep Berea-Smoaks, that
24 including Berea-Smoaks precinct in the
25 First District in Colleton County raises

1 S. Trende

2 different issues than making Green Pond
3 precinct whole.

4 Q The map at South Carolina, the
5 next map didn't limit county splits to the
6 borders of counties, did it?

7 A Can you ask me that again?

8 Q Yeah. The enacted map didn't
9 limit county splits for the borders of
10 counties, did it?

11 A No.

12 Q I mean the split in Chelsea
13 County goes deep into the heart of the
14 county, right?

15 A That's right.

16 Q It goes all the way to the
17 Charleston Harbor?

18 A That's right.

19 Q And the split of Richland County
20 goes deep into the heart of Richland
21 County, right?

22 A That's correct.

23 Q And in your words, the boundary
24 in Richland County has, this is your
25 phrase: Has a distinctive hook shape,

1 S. Trende

2 right?

3 A That's correct.

4 Q Now when you are talking about
5 the Berea-Smoaks issue you write Dr.
6 Ragusa's approach as, quote: "Why didn't
7 the map makers include Berea-Smoaks
8 precinct in District 1?"

9 Is that language that you are
10 quoting anywhere in Dr. Ragusa's report?

11 A No.

12 Q You recognize that Dr. Ragusa in
13 his analysis of District 1 isn't just
14 looking at Colleton County. He also looks
15 at the other counties in the district,
16 right?

17 A Of course.

18 Q He looks at Charleston County,
19 which we just discussed. The split goes
20 deep into the heart of the county, right?

21 A That's right.

22 Q When you write that on page 11
23 that Dr. Ragusa's approach exactly
24 considers the decisions to keep Monticello
25 precinct in District 2 and the Olympia

1 S. Trende

2 precinct in District 6 is equivalent to
3 every other precinct, where exactly in
4 your words does Dr. Ragusa's analysis say
5 this?

6 A Well, because that's what the
7 regression analysis does with every
8 single, every individual county is asking
9 did it move one or did it not.

10 Not every county, every
11 precinct, did it move one or did it stay
12 put. Zero. And so beyond that, it
13 doesn't distinguish between the fact
14 that, hey, if this precinct were
15 included, it would marginally shift the
16 boundary of the district. Versus, hey,
17 if this precinct were included, it would
18 require an entire redraw of the entire
19 map.

20 Q He is presenting a statistical
21 analysis, though, right?

22 A Well. Right, but to the extent
23 you are trying to draw inferences from
24 the statistical analysis, it's only as
25 good as if you are putting proper

1 S. Trende

2 controls in. So you are accounting for
3 other alternative explanations.

4 So it may be true that after
5 controlling for black population, total
6 population, and Biden vote share, that a
7 given precinct would, that a set of
8 precincts was more or less likely to move
9 over.

10 But with some of these
11 precincts, if you look at it, like
12 Monticello doesn't move, because if you
13 put Monticello into the sixth, that
14 entire arm of the second district or the
15 hook of the second district also has to
16 go into the sixth, unless something
17 really radical is done to reshape it.

18 And so to the extent that
19 there's some correlation between these
20 types, these precincts, in other words,
21 it ultimately when it comes to geography,
22 which is an important consideration in
23 drawing maps, the location of the
24 precincts that you add and subtract does
25 matter. And that doesn't factor into his

1 S. Trende

2 analysis.

3 Q So how would you control for
4 that?

5 A I don't know if you can. I'm
6 not sure how useful this analysis is at
7 all.

8 Q Right. He presents, though, he
9 presents three alternative analyses,
10 right?

11 A But they all do the same thing.
12 They don't have any reference to whether
13 a precinct moves in or moves out. It's
14 almost like a poor man's Flip MC. But
15 the Flip Monte Carlo is, you know, does
16 take account of adjacency and which
17 precincts are on the edges of the
18 boundaries when they are flipping them
19 back and forth.

20 Q Have you rerun Dr. Ragusa's
21 regression to see what would happen if you
22 were to exclude Monticello Olypmia from
23 the analysis?

24 A Well, that's it. You can't just
25 exclude Monticello because then

1 S. Trende

2 everything else gets redrawn. But no, I
3 haven't rerun his regression analyses
4 picking and choosing the precincts that I
5 take out.

6 Q Are there any other precincts
7 that you would take out of the analysis
8 besides the three that you would identify
9 in your report?

10 A Those are the three that are
11 problematic. But the entire thing has
12 the issue that it treats a precinct on
13 the other side of the county, as
14 equivalent to the precincts that are on
15 the boundary.

16 To go back to the example of
17 Colleton County, the regression analysis
18 will treat the question as, you know, you
19 are looking at these factors: Why
20 doesn't Berea-Smoaks go in or stay out?
21 And we could make it Ashton-Lodge or
22 Williams or one of these other ones.

23 But the question isn't why does
24 Berea-Smoaks come in or stay out, because
25 to make Berea-Smoaks come in, you have to

1 S. Trende

2 take in Edisto and Peples and all these
3 other precincts to make it contiguous
4 with the rest of the district.

5 Q So what basis do you have if you
6 haven't actually rerun the analysis
7 without the precincts that you have
8 identified as problematic to include?

9 What basis do you have to say
10 the removal of those precincts would have
11 any impact on these conclusions?

12 A I don't know one way or the
13 other whether including these would
14 change the answer frankly. I don't know
15 how you would even do it within the
16 concept that he is moving, that he is
17 going forward with.

18 It just seems fatally flawed to
19 treat some precinct that's 10 precincts
20 away from the district, from something
21 that exists on the precinct boundary.

22 As I understand it, it's not the
23 burden of proof to present that data.
24 It's the burden of proof to present a
25 useful reliable regression analysis that

1 S. Trende

2 answers the question and this doesn't do
3 that.

4 Q You don't have a basis to say
5 that controlling for what you cited,
6 taking out the precincts that you are
7 talking about, would have any impact on
8 his analysis, correct?

9 A No. No. I have a basis for
10 saying if you are looking at a
11 redistricting question, you have to
12 consider contiguity at least. I mean
13 everyone considers that a legitimate
14 redistricting criteria.

15 Q All right, let's try --

16 A I mean if the position is that
17 you don't have to consider contiguity,
18 then Dr. Ragusa and I just have a
19 fundamental disagreement about how
20 redistricting works.

21 Q Or maybe you are not
22 understanding how he is addressing
23 contiguity?

24 A No, I don't think that's it.

25 Q Let's turn to your analysis of

1 S. Trende

2 Dr. Imai, starting on page 1. Is the
3 analysis you present at pages 1 through 8
4 a complete and full statement the opinions
5 you intend to offer at trial concerning
6 Dr. Imai?

7 A Certainly relating to his
8 initial report. But I don't know what
9 questions counsel is going to ask me at
10 trial.

11 Q And you are not planning to
12 express any opinions about Dr. Imai beyond
13 those set forth in your rebuttal report,
14 are you?

15 A I don't think so. No.

16 Q Have you reviewed Dr. Imai's
17 February 10, 2022 deposition?

18 A I have not.

19 Q Do you plan to?

20 A I don't.

21 Q Were you able to replicate
22 Dr. Imai's simulations?

23 A Yes.

24 Q And you acknowledge that the
25 type of simulation analysis that he

1 S. Trende

2 presents has been the subject of extensive
3 publication in peer-reviewed articles?

4 A If you are going to bicker with
5 me about the meaning of large, I guess I
6 could bicker about extensive. But it's
7 certainly been subject to peer review.

8 Q And you yourself in your expert
9 report have presented simulation analysis,
10 right?

11 A That's correct.

12 Q You have used Dr. Imai's
13 re-disked simulation software in other
14 gerrymandering expert work that you have
15 done, correct?

16 A That's correct.

17 Q And you would agree that
18 simulation analysis is widespread in
19 political science?

20 A Certainly within the study of
21 gerrymandering, yes.

22 Q And you would agree the
23 simulation approach to redistricting has
24 been accepted in multiple courts?

25 A Yes.

1 S. Trende

2 Q Now in your opinion, you say
3 that Dr. Imai's simulation did not
4 adequately control for poor retention.
5 That's the main point of your analysis,
6 right?

7 A That's one of the points, yes.
8 It's pages 2 to 4.

9 Q And on page 2, you say that the
10 House guidelines included criteria for
11 poor retention. You would agree with me
12 that's not correct, right?

13 A That should have probably been
14 general assembly instead of House. But
15 yes. I believe the Senate guidelines do.

16 Q Yeah, that's fair. You say,
17 when you are talking about the core
18 retention principle, you say that "the
19 hook shape in Richland County has been a
20 feature of the South Carolina map for
21 over, for 40 years not over but for 40
22 years." Is that correct?

23 A The claim or the --

24 Q Yes.

25 A Both the claim and the last

1 S. Trende

2 statements are correct.

3 Q Did the 1928 map have the hook
4 in Richland County? Did I subtract that
5 wrong and it should be 30?

6 A Yeah, I guess so. 30 years.

7 Q You say the split of Sumter
8 County has also been a feature going back
9 40 years. Do you know whether Sumter
10 County was split before the benchmark map?

11 A I believe it was split looking
12 at the map in 2002. And I believe it was
13 split looking at the map in 1992.

14 I have obviously been clonked in
15 the head at some point and thought that
16 the major redraw was 40 years ago. That
17 1992 was 40 years ago and not 30. But it
18 is not 40 years ago, it's 30.

19 Q Okay. And same question with
20 regard to the divvying up of Charleston.
21 Has City of Charleston been split out of
22 District 1 before the current map?

23 A Charleston and some of its
24 suburbs, that should be 30 years, not 40.

25 Q Now on page 7 you write at the

1 S. Trende

2 bottom: "Legislators were likely drawing
3 from a different distribution of maps, one
4 with higher core retention rates overall
5 and lower democratic performances in the
6 First District in particular than
7 Dr. Imai's ensembles create."

8 What's your basis for saying
9 this is likely what the legislators were
10 doing?

11 A Well, because they produced
12 districts consistently with much, much
13 higher core retention rates. I guess
14 fact discovery will bear out whether they
15 were really interested in shoring up
16 Nancy Mace or not.

17 But that was certainly my
18 understanding of the redistricting
19 process in South Carolina. But I think
20 that's probably the meat of the fight the
21 lawyers are going to have.

22 Q When you make this claim in your
23 report, what evidence from Legislator
24 record do you have that it was likely that
25 legislators were drawing with higher core

1 S. Trende

2 retention rates and aiming to lower
3 Democratic performance in the First
4 District?

5 A Well, you have the output of
6 districts and the fact that core
7 retention is a Senate guideline, which I
8 think is a reasonable basis for thinking
9 that trying to draw much more matches
10 with higher core retention than, you
11 know, Dr. Imai's District 6 usually are
12 has a 40 percent core retention rate.

13 That seems a reasonable
14 inference to me. And I think when you
15 look at political shifts that were made
16 and the fact that it was Republicans
17 drawing the map with a district that we
18 all agree was politically marginal and
19 became less, I think we all agree, it
20 became less marginal; that that was
21 something that we're interested in.

22 But again I think that's
23 probably the meat of the legal fight that
24 you are going to have so.

25 Q Well, aside from the Senate

1 S. Trende

2 redistricting criteria, do you have any
3 visibility into any of the other inputs
4 that went into the map making that lead
5 you to conclude that there were likely,
6 legislators were likely trying, aiming for
7 higher core retention rates and lower
8 Democratic performance in the First
9 District?

10 A As I understand it, the Senate
11 is in large part responsible for the
12 maps. I think that guideline is
13 important. And again I think sometimes
14 you draw inferences from the output.

15 And I think the fact that you
16 don't have districts dropping down to 40
17 percent core retention, like Dr. Imai's
18 districts do for District 6, is
19 reasonable evidence to support that.

20 Q Well, what's your basis for
21 saying the Senate is primarily responsible
22 for the map?

23 A I thought they were the ones who
24 changed up the House map that you
25 presented to me but maybe I have my

1 S. Trende

2 timeline wrong.

3 Regardless, the Senate, that one
4 body engaged in this process, had a
5 guideline regarding core retention, seems
6 a reasonable thing to rely upon in
7 forming an opinion.

8 Q And why would that criteria take
9 precedence over the House criteria?

10 A Well, in general, bodies, the
11 legislative bodies are kind of jealous of
12 their prerogative. So I think the fact
13 that a body put forward its own
14 guideline, and even the House after you
15 showed me the data and has higher core
16 retention than 40 percent I think.

17 So I don't know that anyone was
18 drawing maps with the power drawn maps at
19 40 percent core retention factor.

20 Regardless, I think the, personally think
21 the legislative guideline and the output
22 is a sufficient basis for that opinion.

23 MR. FREEDMAN: All right. If we
24 can go off for a minute I just want to
25 confer with my counsel, but otherwise,

1 S. Trende

2 I think I may be done.

3 THE VIDEOGRAPHER: Time is 3:43
4 and we are going off the record.

5 (Recess taken: 3:43)

6 THE VIDEOGRAPHER: The time is
7 3:44 and we are back on the record.

8 MR. FREEDMAN: Plaintiffs have
9 no further questions at this time.
10 Thank you, Mr. Trende.

11 THE VIDEOGRAPHER: Any other
12 questions?

13 MR. GORE: I do have some
14 questions but maybe I should defer to
15 House defendants and election
16 commission defendants before I go.

17 MS. CRUM: This is Liz Crum, the
18 election commission defendants. I
19 have no questions.

20 MR. DIAMADURAS: This is
21 Konstantine Diamaduras for House
22 defendants. I have no questions.

23 MR. GORE: Thank you.

24 EXAMINATION BY

25 MR. GORE:

1 S. Trende

2 Q Mr. Trende, I have just a few
3 questions for you today. In your rebuttal
4 report on page 2, do you still have that
5 in front of you?

6 A I do.

7 Q I think you had some back and
8 forth with Mr. Freedman about whether
9 certain time periods had been 40 years or
10 30 years, that you were referring to the
11 hook shape in Richland County. Do you
12 recall that discussion?

13 A I do.

14 Q And you may have also been
15 referring to splits in Sumter County. Do
16 you recall that discussion as well?

17 A I do.

18 Q And if the difference were
19 really 30 years rather than 40 years,
20 would that have any effect on your
21 opinions with respect to Dr. Imai's
22 simulations or your critique of those
23 simulations in your rebuttal report?

24 A It would not.

25 Q And Mr. Trende, I would like to

1 S. Trende

2 turn now to the Senate guidelines, which
3 are Exhibit 13, tab 33. And just so the
4 record is clear does this set of
5 guidelines mention preserving the course
6 of districts as a consideration in drawing
7 the Congressional plan?

8 A It does.

9 Q And is that on page 2?

10 A Page 2, Roman Numeral 3
11 sub-point B.

12 MR. GORE: I have no further
13 questions. Thank you.

14 THE VIDEOGRAPHER: We are off
15 the record at 3:47 p.m. and this
16 concludes today's testimony given by
17 Sean Trende.

18 The total number of media units
19 used was six and will be retained by
20 Veritext, New York.

21 (Discussion off the record)

22

23 (Continued on the next page to
24 include the jurat)

25

Page 221

1 S. Trende

2 MR. GORE: Ms. Court Reporter, I
3 would like to order a transcript.
4 Electronic is fine. And I don't need
5 a rush transcript.

6 (Time noted: 3:50 p.m.)
7
8
9

10
11 -----
12 SEAN PATRICK TRENDE
13

14 Subscribed and sworn to before me
15 this day of , 2022
16
17 .
18
19
20
21
22
23
24
25

C E R T I F I C A T I O N

STATE OF NEW YORK)
: Ss.
COUNTY OF NEW YORK)

I, R. BOBBIE LEVY, a
Certified Shorthand Reporter and a Notary
Public, do hereby certify that the
foregoing witness, was duly sworn on the
date indicated, and that the foregoing is
a true and accurate transcription of my
stenographic notes.

I further certify that I am
not employed by nor related to any party
to this action.

IN WITNESS WHEREOF, I have
hereunto set my hand this 3rd day of
August, 2022.



R. BOBBIE LEVY, C.S.R.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

WITNESS INDEX

WITNESS	PAGE
SEAN PATRICK TRENDE	
EXAMINATION BY	
MR. FREEDMAN:	9
MR. GORE:	217

E X H I B I T S

FOR IDENTIFICATION

EXHIBIT	DESCRIPTION	PAGE
Exhibit 1	Deposition notice	18
Exhibit 2	Expert report dated 4/18/22	22
Exhibit 3	Rebuttal report dated 5/4/22	22
Exhibit 4	Curriculum vitae	51
Exhibit 5	Updated curriculum Vitae	56
Exhibit 6	Series of invoice Receipts	57
Exhibit 7	Congressional House Staff map	88

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

E X H I B I T S

FOR IDENTIFICATION

EXHIBIT	DESCRIPTION	PAGE
Exhibit 8	2021 Guidelines for South Carolina Redistricting labeled Tab 4.1	92
Exhibit 9	House constituency Core analysis	98
Exhibit 10	Senate constituency Core analysis	101
Exhibit 11	Backus decision	112
Exhibit 12	Population summary Labeled Tab 26	135
Exhibit 13	County borders labeled Tab 33	146
Exhibit 14	House District Report And staff plan labeled Tab 25	149
Exhibit 15	House Redistricting Report labeled Tab 28	157
Exhibit 16	Email Bates stamped SC Senate-000034244 Labeled Tab 34	162

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

E X H I B I T S

FOR IDENTIFICATION

EXHIBIT	DESCRIPTION	PAGE
Exhibit 17	Email dated 11/24/21	165
	Bats stamped	
	SC-Senate-00005245	
	Labeled Tab 35	

**Exhibits attached electronically to
transcript**

800-567-8658

WITNESS' NAME: SEAN PATRICK TRENDE

_____ / _____ / _____ / _____

NOTARY PUBLIC MY COMMISSION EXPIRES

[& - 1992]

Page 1

&	210:2,3 213:22	1146 9:2	165 225:5
& 2:5 140:18	223:14	11:50 91:8,11	17 95:11,11
0	1,000 162:3	11:59 91:13	141:18 166:21
0 25:24,25	10 9:24 33:20	12 119:13 136:15	166:25 167:9
00003245 166:23	54:22 100:17	136:18 144:2	225:5
167:10	102:22 103:2,4	147:6 224:14	18 29:11 30:2
000034244	107:12 108:13	1221 4:8	31:13,19 51:2
164:14 224:24	116:11,16 117:3	125 2:16	96:13 106:14
00005245 225:7	118:14 124:11	12:54 130:19,22	111:8 138:4
03302 1:4 7:9	147:7 148:19	13 88:9 124:2	139:2 142:4
1	152:14 153:9	133:14 147:23	157:23 223:14
	157:23,24 196:4	148:2 182:14	18th 2:16 26:10
1 6:22 18:20,23	197:16,19	220:3 224:16	28:8 55:6
19:8 53:12	208:19 210:17	135 224:14	190,000 115:8
56:12 89:11	224:11	14 125:5 150:12	1900s 119:8
90:21,23,24 98:4	10,000 111:7	150:15 224:18	1902 117:3 118:8
98:5,20 102:10	170:7 197:25	140,000 115:14	118:18,22
104:24 105:3,11	10,808 156:3,11	146 224:16	120:18 121:3
105:17,22 106:3	163:2	149 224:18	133:22 193:7
106:7,9,22,23,24	100 75:5 117:14	14th 112:4	1928 213:3
107:2,3,25	117:18 149:11	114:20	1932 119:13
108:15,20	157:17 191:18	15 126:24 158:18	120:3,19 121:4
109:22 110:7	199:23	158:21 164:16	133:22 193:2
114:14 115:15	10004 2:17	224:21	1966 122:16
115:16 120:10	100115 58:9	15,000 110:17	1970 123:11
126:12 135:6,11	101 224:11	162:7 163:7	1970s 122:10
135:13 139:14	104 3:9	15,389 106:8	1972 133:22
140:4 141:13	10:45 56:10,13	108:14 109:21	198 192:24
142:9,21,25	10:58 56:14,16	110:7	1982 122:7
145:19,21,22	10th 51:7,16,25	157 224:21	123:25 124:4,21
146:21 152:7,12	141:22	16 128:3,24	126:10,18
152:23 157:2	11 113:11,13	164:3,6 224:23	133:22 192:22
158:6,8 162:9	118:14 195:14	16.56 142:3	1992 125:5,6,9
163:3,5,9 189:15	203:22 224:13	16.6 141:14	125:13,22 126:4
190:20,22	11/24/21 166:22	16.7 141:18	127:11 133:22
191:11,15 192:6	225:5	16.74 142:4	192:20 213:13
192:11 194:6	112 224:13	162 224:23	213:17
198:14 203:8,13			

[1:35 - 4,700]

Page 2

1:35 132:3,11	2014 79:13	29 178:14,16,17	33 109:17 147:22
2	2018 109:2	180:16	147:24 186:3
2 20:22 26:5,7,13	2020 34:11 77:21	29201 4:9	188:16 220:3
29:12 30:3,8	86:3 109:8	29601 3:11	224:17
31:19 51:18	2021 33:22 88:9	2:25 168:15	34 164:2,5,10,12
56:18 59:7 63:3	93:6,17 167:13	2:27 168:12	184:25 188:17
85:7 91:10	224:5	2:33 168:17	189:15 224:25
95:15,19 103:9	2022 1:14 6:9	2nd 155:24	35 166:20,24
107:2 112:6	11:24 52:20	182:21 191:2	184:14 194:7
114:14 116:11	54:11,18,22,25	3	225:8
129:24 140:10	55:8 61:23	3 21:18 27:19,21	35,629 106:2
142:5 145:24	85:21 106:18	27:25 28:12,15	37 113:9
146:2,3,22	196:4,5 210:17	28:20 29:12	3700 162:5
168:21 177:3	221:15 222:22	30:3,8 36:12	3:00 188:13
190:21,22	226:6,23	59:11 60:3	3:01 188:15
199:20,23	21 1:14 6:9	91:15 95:20	3:10 194:23
203:25 212:8,9	226:6	96:12,13 98:10	195:2
219:4 220:9,10	217 223:9	103:18 104:2	3:16 195:4
223:15	22 140:9,10	105:5 107:3	3:21 1:4
2.72 143:2	142:8 223:15,17	130:21 146:16	3:21cv 7:8
20 11:20 65:10	2200 161:24	188:11 195:9,10	3:44 218:7
113:22 143:25	23 155:16	220:10 223:17	3:47 220:15
157:20,22	24 154:7 167:13	3,242 163:3	3:50 221:6
20,000 67:20	168:21 169:10	3,342 156:12	3c 148:5
20,240 105:21	24.1. 88:14 133:9	3,982 109:3	3rd 155:25
20.27 139:15	25 150:11,14	30 83:13 102:18	222:21
143:2	170:2 172:20	179:18 181:10	4
200 157:17	197:17 224:20	213:5,6,17,18,24	4 28:2 29:11
20001 2:8 3:20	25,000 71:17	219:10,19	30:2 31:13 51:2
2002 126:23	26 136:11,17	30,000 65:10	51:19,21,24
127:22 133:23	154:25 155:4	66:15	106:13,16
192:8 213:12	174:11 175:9,11	30was 103:2	107:14 108:5
2011 120:4	224:15	31 182:17	132:13 146:5,6,8
121:19	27 98:24 176:8	32 93:4 178:4	146:22 168:14
2012 86:3 106:18	28 158:14,20	183:15 184:13	212:8 223:19
112:2 128:2	175:12 177:6	184:14	4,700 161:21
133:23	178:3 196:4		
	224:22		

[4.1 - accommodate]

Page 3

4.1 224:8 4/18/22 26:7 223:16 40 212:21,21 213:9,16,17,18 213:24 215:12 216:16 217:16 217:19 219:9,19 400 57:10 41 58:21 42 58:21 43 19:18,18 43015 9:3 45 58:15 45.7 154:10,17 45.7. 154:16 4855 222:24 4th 27:18 36:13 36:15,20 37:12 38:8 39:15,22 43:6 156:2	52,000 115:15 56 223:20 57 223:22 59.9 155:3,6 5th 12:5 156:3 6 6 57:19,21 59:12 61:8 65:12 98:12 100:2,4,7 100:11,18,23 101:25 103:11 103:13 105:22 105:25 106:3,7,9 107:23 108:16 109:22 110:8 114:6,14,16 115:14,16 135:21,22 142:6 146:10,11,13,22 152:7,13,23 157:3 158:6,8 162:9 163:3,4,9 170:12,25 171:14 177:3 189:15 192:6,12 194:6 195:6 204:2 215:11 216:18 223:22 601 2:7 6th 125:24 126:16 127:9 128:13 129:23 134:18,23 156:10,12,13 159:13,25 161:18 179:5 180:19 181:6	182:21 7 7 31:19,24 32:16 85:9 88:15,17 89:7,12 93:21 111:13,14 140:10,13,14 142:6 143:7 146:16 147:3 148:9 163:2 213:25 223:24 70,000 70:17 73,120 100:20 731,203 101:12 731,204 101:12 149:15 75,000 100:19 77.4 100:23 77.41 100:8,15 100:24 102:4 103:13 115:23 8 8 31:20,24 32:17 33:6 34:14 57:9 93:5,8 113:16 133:9 157:10 195:12,14 196:12 210:3 224:5 800-567-8658 226:4 82.84 89:11 92:9 98:21 83 35:20,21 36:6 84.46 105:17 87.25 58:5,11	87.55 98:12 100:12,15 101:2 115:21 88 223:24
			9 9 99:3,6 108:13 113:16 155:16 155:17,18 200:22 223:8 224:9 90 110:4 92 224:5 92.78 105:4 94 89:13 92:12 94.52 105:11 98 224:9 99.96 89:12 92:7 9:30 1:14
			a a.m. 1:14 6:9 ability 42:24 44:12 125:25 126:6 able 45:25 46:7 128:11 190:5,9 210:21 absolute 163:11 academic 53:25 54:6 78:6,15 201:16 academics 86:12 acceptable 63:8 accepted 211:24 access 19:12 133:5 accommodate 11:11

[account - analysis]

Page 4

account 63:11 176:25 206:16	47:2	213:17,18	amount 24:12,20 55:11 69:7
accounting 205:2	addressing 209:22	agree 6:19 100:14 110:6	analyses 76:11 115:24 197:2
accurate 10:25 54:19 222:15	adds 150:2	115:6 211:17,22	201:8 206:9
acknowledge 210:24	adequately 212:4	212:11 215:18	207:3
aclu 2:13	adjacency 206:16	agreed 5:5,10,14 187:6	analysis 30:9,13 30:20,24 38:4
act 60:14 63:12	adjacent 201:10	agreement 23:4	41:9 45:8 55:24
action 7:15 9:8 65:2 70:5 222:19	adjective 91:25	aiming 215:2 216:6	55:25 74:19,25
actions 172:20	adopted 120:20 120:22 122:10	al 1:7,11 7:4,5 226:5	75:9,17 76:7,19
active 173:25	adriel 2:19 3:24	alabama 113:3	76:23 95:9 99:5
activity 24:15,24	affiliated 66:6	alexander 1:11 2:15 3:18 7:5 226:5	99:22,25 102:25
actual 34:6 95:9 201:22	affiliation 66:4 66:24 68:10 69:24	alignment 122:22	103:4 104:5,24
ad 93:17	affixed 123:18	allocated 157:13 157:13	107:13,16 108:7
adam 16:20 17:3 164:16,24 166:6 167:12	africa 35:18	allowed 82:8	108:10,11 114:7
adams 61:25 63:16	african 109:24	almanac 77:15 79:12,13	114:11 115:22
add 107:24 108:2,3 149:7,14 180:18,24 205:24	age 110:20,22,23 111:4,8 138:8,15 138:20 139:2 140:3 154:9 155:3 157:22,23 196:17,19 197:11,20,22 198:2,4	alternative 87:21 166:5 205:3 206:9	116:7,12,25
added 69:6 182:2	agencies 64:12	alternatives 87:24	118:3 128:23
adding 181:22	agency 64:9	amended 18:22 19:8	129:4 136:5
addition 29:19 46:9 73:6 116:18	aggawal 4:17	amendment 112:5 114:20	147:10 151:11
additional 30:20 30:24 52:16	aggregated 104:15	american 2:12 50:13,14 77:15 79:13,14 109:24	153:8 156:5,22
address 8:25 40:24 43:12	aggregating 161:2	amicus 16:3 66:16	168:22,24 169:5
	ago 19:15 99:15 117:14,18 191:19 213:16		170:16,16

[analyze - average]

Page 5

<p>analyze 104:8</p> <p>analyzes 105:2</p> <p>analyzing 137:6 163:17</p> <p>anchored 117:19 117:22 118:9 119:9 127:20 129:11 134:6</p> <p>anderson 117:19 125:17</p> <p>andrew 164:14 164:17 166:7 167:11</p> <p>andy 14:5,15,17</p> <p>answer 10:14 21:9 37:3 38:10 42:24 44:4,13 46:8 64:2 76:2 160:4 171:5 178:6 188:3 192:16 208:14</p> <p>answered 37:2 75:25</p> <p>answering 11:14</p> <p>answers 209:2</p> <p>anti 60:5</p> <p>anybody 14:11 16:16 187:2</p> <p>apologize 82:15 188:4</p> <p>application 55:2 55:24</p> <p>applies 127:22</p> <p>apply 78:16 161:14</p> <p>applying 143:19</p> <p>appointed 72:8</p>	<p>appointments 54:6</p> <p>appreciate 53:3 53:16</p> <p>approach 203:6 203:23 211:23</p> <p>approaching 60:8</p> <p>approximately 11:18</p> <p>april 11:24 12:5 26:10 29:11 30:2 31:13,19 51:2,11,13 52:9 53:12 55:6 59:8</p> <p>apush 122:9</p> <p>area 125:2 145:2 169:14 174:12 174:25 177:9,15 178:18 182:18 184:2,13 185:7 186:17 187:12 190:21,23</p> <p>areas 48:8,25 50:22,24 125:14 169:18 177:17</p> <p>argument 173:5</p> <p>arizona 60:15 62:7 72:3 81:17 86:16</p> <p>arlington 73:8 73:12,16,25 74:6 74:15,19,24 75:8 75:16 76:13</p> <p>arm 205:14</p> <p>arnold 2:5</p> <p>arrangement 72:15,22 73:2,4</p>	<p>arrington 109:4 109:15</p> <p>article 55:16,23</p> <p>articles 54:4 55:14 78:23 79:4 211:3</p> <p>articulate 45:21</p> <p>ashton 207:21</p> <p>aside 41:19 83:12 174:4 215:25</p> <p>asked 17:20 30:23 31:2 39:7 40:22 41:12 43:20 44:20 45:17 47:9 74:14 76:22 79:19 80:7,16,20 87:5 165:9 182:25</p> <p>asking 11:14 31:12 87:20 91:17 166:8 173:12 204:8</p> <p>asks 50:21</p> <p>aspect 63:15</p> <p>aspects 78:14</p> <p>assembly 96:2 113:20 212:14</p> <p>assert 114:17</p> <p>assess 89:21</p> <p>assessing 94:16 143:19</p> <p>assessment 143:20</p> <p>assign 157:24</p> <p>assigned 90:3,15 90:17 97:23</p>	<p>98:5 190:25</p> <p>assignment 90:24,25 97:18</p> <p>assignments 79:12</p> <p>assume 42:8 75:13 109:5 110:12 149:25</p> <p>assuming 22:4 58:18 133:24</p> <p>assumptions 22:16 23:15</p> <p>attached 53:8,8 225:10</p> <p>attachment 167:14</p> <p>attorney 9:14,20 22:10 64:17 70:25 71:2,13</p> <p>attorneys 2:6,14 3:6,17 4:6 5:5 22:14,17 68:5 81:17</p> <p>attribute 172:20</p> <p>attributing 173:15 183:4</p> <p>audibly 10:15</p> <p>audio 6:17,17 132:16</p> <p>august 33:21 222:22</p> <p>authored 77:14</p> <p>available 21:3 33:7 99:12,23</p> <p>avenue 2:7 3:19</p> <p>average 153:20 154:13 155:7</p>
---	--	---	--

[avoid - better]

Page 6

avoid 72:13	111:25 112:8,11	bats 225:6	143:22 147:11
aware 36:5 73:8	112:22 113:10	bear 214:14	147:15 165:6,13
73:20 92:17,23	113:12 114:2	beard 92:4,6	170:22 171:17
109:4 120:18	115:3,11,20	bearing 164:13	181:15,15 194:3
142:19,24 186:8	128:4 224:13	beaufort 118:9	198:22 212:15
186:25 201:15	bad 171:20	118:16,16,22	213:11,12
b	bagley 39:24	126:19 127:14	belize 16:2 60:12
b 24:12 92:6	40:9,13,20 41:2	127:17,20,23	benchmark
118:17 159:17	41:6,10 45:19,22	129:11,16,20	85:12,23,25
159:19 165:21	46:17,23	134:6,12 188:19	86:21 87:2,9,10
166:3,10 220:11	bagley's 46:3,6	188:23	87:12 89:10,23
223:11 224:2	47:3	becoming 79:16	111:18 112:4
225:2	baker 121:21	beech 159:16,22	114:3 128:19
back 28:10 41:7	122:9,14 123:10	161:24	129:2 130:9
56:16 59:7	ball 158:12	beginning 56:17	140:16,22
75:22 91:13	ballpark 27:8	60:3 91:14	141:14 143:11
95:8 103:18	banker 120:24	132:12 141:7	143:17 144:6
104:12 107:12	based 44:2,16	168:18 195:5	145:22 146:3,7
111:12 117:18	45:22 119:14	behalf 64:3	146:12 147:6
118:5 119:3,7	125:18 135:18	65:13 66:18	154:23 155:12
130:3 132:11,14	145:9 184:8	67:4 69:9 70:23	155:22 170:4,13
133:8 140:8	baseline 55:7	behavior 52:19	171:23 172:12
143:6 147:2	91:20	54:10	176:3 192:2
156:13 160:9	bases 121:23	belabor 52:24	213:10
168:17 180:16	basic 39:19 44:3	believe 12:7 15:4	berea 201:23,24
186:3 188:15	121:23 124:19	25:2 30:6 32:7	203:5,7 207:20
195:4 206:19	basically 55:15	33:23 39:16	207:24,25
207:16 213:8	90:7 144:25	50:7,21 51:8	berkeley 188:19
218:7 219:7	basis 30:4 87:3	52:9,20 59:3,15	188:22
backfill 160:22	104:15 120:17	64:22 66:11,25	berkley 152:7
background	186:11 190:5	67:24 68:4 71:2	bernie 172:9
174:18,19	200:7,16 201:2	73:10 74:21	best 31:11
187:18	208:5,9 209:4,9	75:2 82:3 83:13	106:22
backgrounds	214:8 215:8	84:8 86:22	better 19:6 77:8
35:25	216:20 217:22	89:17,24 90:3	80:2 101:21
backus 32:18	bates 164:4,13	97:16 99:12	102:8 151:22
96:6,7 111:20,24	166:23 167:9	104:10,17 112:6	180:5
	224:23	114:10 141:25	

[beyond - calculated]

Page 7

<p>beyond 26:23 29:22 30:13,15 30:24 39:11,20 44:24 45:16 48:8 49:2 85:2 112:19 179:6 195:21 204:12 210:12 bicker 211:4,6 biden 155:24 156:13,21,25 157:2,4,17,24 158:5 159:23 160:11,15 162:10 163:2,4 163:10 178:19 205:6 big 38:18 100:16 bill 196:10 billed 25:11 billing 24:5 25:9 bills 24:5 binder 150:11 birnie 171:18,19 171:22 172:10 bit 59:24 96:13 111:12 132:24 152:3 156:11 163:19 185:25 black 105:15,16 105:21 106:2,6,8 108:15 109:21 110:7,11 111:7 138:18,20,25 139:10 153:19 153:23 154:9 155:2 169:12 177:13 178:21</p>	<p>179:23 196:17 196:19 197:10 197:18,19,25 205:5 blk 138:12 139:15 block 97:12,19 97:22 98:4,5 157:20,25 blocks 90:2,2,12 90:14 157:11,12 157:18 blowups 128:11 blue 179:5 bobbie 1:21 7:13 222:10,25 bodies 217:10,11 body 72:9 217:4 217:13 border 118:11 118:20 127:21 129:13,17,21,22 134:8,13 borders 147:25 202:6,9 224:16 bored 173:22 bottom 32:16 34:14 59:11 60:25 95:11 113:15 116:11 116:16 118:13 128:24 159:10 175:9 176:8 178:3 180:16 181:10 184:14 214:2 boundaries 114:12 148:6,24</p>	<p>149:17 172:8 189:17 190:2,10 190:16,25 191:3 191:5,16 192:5 192:11 193:4,9 193:11 206:18 boundary 149:16,18 191:14,22 201:10,14 202:23 204:16 207:15 208:21 bounding 145:3 bounds 144:22 boutique 67:11 boy 140:17 break 11:10,15 52:9 53:4,19 56:5 91:4,17 130:14 168:4 194:13 breakdown 174:17,21 briarwood 181:16,17,20 brief 16:3 briefly 57:8 84:14 bring 12:14 189:16 190:15 broad 2:16 77:7 107:19 broader 79:2 114:22 broken 156:8 brought 72:12 112:6 191:21</p>	<p>btd 157:2 bullet 89:6 91:19 143:8 147:5 bunch 185:10 burden 208:23 208:24 bureau 34:11 burr 4:5 bush 126:3,5 busy 185:12,13 bvap 138:20,22 138:23,24 139:4 139:7,8,11,13 140:14,21,22,24 140:25 141:13 141:17 143:2 154:15 155:6,7 174:13,19 183:21 193:15 193:18,24 194:4 197:22 198:25 bvaps 142:21 177:17</p>
c			
<p>c 1:11 2:2 3:2 4:2 7:5 8:16 24:14 60:22 61:16 69:15 132:5 159:17 222:2,2 226:5 c.s.r. 222:25 calculate 101:6 144:14 145:8 calculated 100:10,22,25 102:12,17 144:16 145:11</p>			

[calculates - changes]

Page 8

calculates 103:12	178:12 184:23 202:4 212:20	128:4 133:16 136:4 137:10	certainly 38:11 39:5 40:10
calculating 101:20	214:19 224:6 carolina's 78:17	142:15 145:12 145:14 151:8	41:25 42:7 44:6 47:25 60:11,13
calculation 100:4,7 102:4,5 153:14	116:19 carr 120:24 122:9 123:10	153:17 162:20 182:3 196:5 198:20 201:22	60:16 62:21 63:17 64:12 68:6 73:22 74:3
calculations 81:18	carries 188:16 carter 61:10	226:5 cases 32:22 33:4	78:9 84:14 94:14,22 110:5
call 71:6	63:5 case 1:4 7:8 13:8	52:16 59:21 61:2,10 62:3,25	123:2 195:24 210:7 211:7,20
called 8:17 150:25 167:15	13:22 14:3,6,9 14:13,22 16:2	63:19 65:12,15 66:10,17 76:12	214:17 certainty 160:5
cameron 71:3,5 71:6,7,8	20:6,7 21:2,21 22:3,11 24:14,22	81:7,8 165:9,11 165:18	163:15 certified 1:22
campsen 13:15	25:10,14,17 29:14 30:10	cast 156:24 157:17	73:15 222:11 certify 222:12,17
candidate 160:20,23	32:6 50:5,20 51:8 52:2 53:23	categories 20:2 category 20:3,22	challenge 112:2 114:13
cap 71:17	53:24 54:23 59:2 61:23	21:18 24:4 caucus 113:4	challenged 112:22 113:4
capacity 165:4	62:14,14,15 63:13,14,23	cause 60:23 62:18	114:2 challenges
captioned 20:6	64:21 65:14,18 66:19 67:16,23	cautious 32:14 caveat 81:16	111:20 chance 42:22
carlo 206:15	68:8,19,23 69:10 69:11,25 70:13	cell 6:14 cellular 6:12	chances 110:15 change 110:13
carolina 1:3,6 3:10 4:7,9 7:3,7	70:19 71:12,18 73:7,9,17 74:2	census 34:10,11 97:12 157:11,12	124:18 156:11 208:14 226:8
11:24 13:7,21 15:8,18 17:3,8	74:22 75:11,17 75:20,24 76:6,20	157:18,20,25 center 118:17	changed 44:23 176:9 216:24
17:12 18:2,9,13 36:7 60:19	79:16,18,22 80:6 80:10,17,20,24	120:10 century 116:21	changes 52:14 111:17 116:17
65:12 66:10,14 76:24 77:4,10,25	81:7,13 84:11 86:17 99:17	119:3 191:12 cepeda 2:19 3:24	128:25 130:8 142:11 156:9
78:4,7,10,20,24 79:4,10,10 85:18	112:13,14,14 114:12 115:4	certain 22:6 50:22 172:20	175:25 179:2 180:17,22,25
88:4 93:6,15 94:8 112:23	120:4 127:2	219:9	186:11 189:12
117:9,20 118:20 119:20 121:9			
125:15 137:5,19 140:16 142:20			
169:8 175:18			

[changes - committee]

Page 9

189:15 chapman 61:10 61:11 63:5 66:17 characterized 183:2 charleston 118:24 119:4,9 120:7 124:22 126:11,17,21 127:6,10,14,17 128:8,14,16,18 129:6 133:20 134:3,9,14,15 152:8 184:13 185:7 187:12,14 188:24 189:22 189:25 190:7 191:23 192:3,9 193:14,19,25 202:17 203:18 213:20,21,23 charlie 14:8 charlotte 125:21 chart 105:20 107:11 137:15 137:25 139:7 140:21 152:3 check 59:3 139:25 154:8 182:6,15 checked 82:5 107:23 checks 58:25 64:22 65:22 chelsea 202:12 choosing 207:4	chose 35:19 chris 3:7 159:17 circle 41:7 144:21 145:3 cite 32:17 cited 107:6 186:11 209:5 city 119:3 120:7 124:22 126:11 126:17 127:5,10 128:7,15,18 129:5 133:20 190:25 213:21 civil 2:12 claim 62:20 63:7 63:10 73:7,9,20 75:20 112:5,7 114:22 173:18 175:23 176:4 187:14 212:23 212:25 214:22 claims 62:5,8 63:2,3 111:23 174:6 class 75:5 classes 78:21 classic 35:12 clause 114:19 cleaner 198:15 cleanest 64:5 clear 10:6 28:11 33:9,17 37:7,7 40:16 53:21 56:22 57:16 79:7 85:13 87:15 99:21 109:16 110:16 132:24 140:20	142:23 145:18 190:4 220:4 clearly 10:15 37:15 click 39:7 client 63:22 65:25 66:23 75:2 clinical 159:8 clonked 213:14 close 42:23 44:12 46:7 71:18 108:19,22 109:7 closely 150:21 closer 58:18 cluster 63:22 code 20:11,23 21:5 38:5,6,14 39:12 90:4 97:5 141:9 178:8 179:15 coded 178:19 codes 185:23 collect 20:8 21:8 21:25 22:20 24:18 collected 20:14 21:12 86:12 collection 61:2 colleton 32:18 96:5 127:2 152:17,23 201:25 203:14 207:17 columbia 4:9 7:8 127:25 182:19 182:24 183:10	column 90:9 97:20,21 105:9 105:15,25 138:4 138:11 139:13 139:13,19,23 140:24 columns 98:4 105:7 139:10 combination 149:7,14 150:2 combined 127:24 combining 125:18 come 16:24 18:11 46:2 168:24 169:6,24 172:3 175:13,17 177:22 178:5,10 180:10 184:17 184:21 185:18 207:24,25 comes 59:3,5 77:19 86:22 144:12 168:25 205:21 coming 97:9 187:2 command 97:23 commission 4:7 8:13 60:16 61:6 64:11 218:16,18 226:25 committee 33:21 33:25 72:19,23 93:16,17 94:4 99:13 133:13 142:25
---	--	---	---

[common - considered]

Page 10

common 60:23 62:18 143:11 157:7 158:2 186:17	compensated 57:10	conclusion 91:18 130:4	148:9 151:4,21 151:22 152:5,18
commonalities 117:24	compensation 22:12 23:8 57:8	conclusions 208:11	153:5 160:19 220:7 223:24
communicate 18:3	competitive 77:21	condition 11:5	conjunction 13:8 13:22 14:13,21
communicated 22:2,7	complaint 84:23	conducted 33:20	51:25 54:21
communications 21:20,23 23:24	complete 10:25 15:25 29:13 30:3 32:4 37:3	confer 217:25	connected 24:7
communities 147:14 186:18 189:24 199:13	completed 55:25	conference 1:6 1:16 7:4 8:3	connection 24:13,21
compact 121:16 135:6,7,13,17,22 135:23 143:17 145:16,21 146:2 146:7,12,17,18 146:22,23	completely 112:15 120:2 121:15	confidence 161:10,13 163:12	consider 32:21 39:13 77:2 87:8 87:16,23 88:2,7 91:21 92:14 99:16 123:10 130:5 133:15 136:4 137:8,11 142:14 151:7 153:16,23 163:20 166:5 171:11 194:4 209:12,17
compactness 135:2 143:12,20 143:21 144:5 145:20	completeness 33:12	confirm 128:11	consideration 17:21 94:23 147:12,14 186:20 205:22 220:6
compare 87:6 132:25 143:10 143:13	complies 116:15	conform 128:11	considerations 199:22
compared 117:15 121:15 121:20	composition 197:13	conforming 138:17	considered 20:4 22:15 23:11 32:5,9 36:11,17 37:10 38:7 39:3 39:4 55:15 87:17 93:21,22 115:20 133:2 142:20
compares 135:3	computer 21:5 145:11	conformity 189:16 190:15	
comparing 85:11 86:25	concept 102:14 161:14 200:24 208:16	cong 88:20 136:25	
comparison 87:3 126:10 191:18 191:20	concepts 62:12	congressional 17:12,17,24 18:9 20:5,7 21:2,21 22:11 24:14,22 70:19 72:23 79:11 85:19 88:16,21 89:25 93:18 94:10,19 95:17 112:3,23 113:23 114:4,11 114:18 115:2,7 115:10,19,21 118:23 119:5 120:8 124:23 127:7,15 128:9 129:7,21 133:9 133:21 135:7,12 135:24 136:6,9 137:7,20 140:5	
	concern 60:7 70:19		
	concerning 11:23 40:18 42:5 45:8 51:17 169:6 195:16 210:5		
	concerns 113:17		
	conclude 216:5		
	concludes 220:16		

[considering - counsel]

Page 11

considering 115:10 121:2,5,6 162:18 considers 201:12 203:24 209:13 consistent 57:4 107:14 116:21 120:6 130:5 140:15 189:4 191:12 consistently 214:12 consolidated 61:3,7,13 62:24 constituency 99:5 100:3,7,23 102:6,25 103:10 103:12 104:5,20 107:13 110:3 224:9,11 constituency's 99:22 constituted 115:3 consultant 72:8 contacted 165:8 166:6 contacts 14:25 contain 29:12 30:3,8 36:16 contained 23:10 33:14 89:19 95:3 190:24 contains 36:20 content 21:22 context 14:23 77:12 99:11 117:8 119:19	121:8 122:2 contiguity 200:23 209:12 209:17,23 contiguous 208:3 continue 6:18 continued 3:2 4:2 79:25 132:8 220:23 continues 175:12 continuities 124:8 contours 169:17 179:8 contributing 33:16 control 198:6 199:8,11 200:5 200:17 206:3 212:4 controlling 199:2 200:8 205:5 209:5 controls 200:10 200:20 205:2 conversations 6:12 82:21 83:4 convert 198:11 convex 143:24 convey 174:15 177:7 178:24 180:4 183:23 conveyed 174:24 cooper 190:6 192:3,8 copies 37:17	copy 6:3,3,6 18:20 26:9 28:2 53:11 56:20,21 57:14,17,23 84:10 113:9 core 89:15,22 91:19,21 92:7,15 92:19,19,24 94:18,25 95:2,16 95:23 96:8 98:9 98:11,13,20 99:4 99:21,22 100:3,6 100:10,22,25 101:20 102:5,12 102:15,24 103:10,12,19 104:5,6,9,13,19 105:3 107:13,13 115:18 191:11 199:11 212:17 214:4,13,25 215:6,10,12 216:7,17 217:5 217:15,19 224:10,12 cores 89:9,14 116:13,20 121:23 correct 9:13 17:18,19 18:10 18:14 25:7 29:24 32:2,3 37:13 39:25 40:20,21 51:3 57:12 59:14 70:8 71:11 74:16,17,20 93:23 98:14,18	98:21,22 100:5,9 100:13 103:17 103:20,21 104:17 105:6,13 105:19,23 106:5 108:8 109:19 115:12,17,25 116:5 119:6,11 120:9,12,25 127:2 128:4,5 129:8 133:3,4,6 133:7,17 140:7 141:16,19 142:22 143:3 145:17,23 146:4 146:9,14,19,24 151:18 152:10 152:16 155:11 160:15 176:15 176:16 189:7 195:23 202:22 203:3 209:8 211:11,15,16 212:12,22 213:2 correctly 109:6 171:22 correlate 200:4 correlation 205:19 correspond 137:19 139:7 correspondence 22:9 23:19 38:25 corresponds 100:18 151:4 counsel 7:2,17 12:24 15:12
--	---	--	--

[counsel - data]

Page 12

20:13 21:15 23:9,14,25 24:3 24:8 26:23,24 27:2 28:19 37:20 38:17 39:2 43:21 45:17 47:9 56:20 60:14 69:12,13 83:22 141:10 178:9 180:14 184:3 189:10 195:17 210:9 217:25 count 9:23 71:25 196:17 counties 118:10 127:21 129:12 129:17,22,22 134:7,12 147:6 147:11 149:7,14 150:2 152:4,13 152:18 153:4,10 153:14,18,25 154:2 188:25 193:13 199:14 200:18 202:6,10 203:15 country 125:14 125:23 counts 199:4 county 32:19 96:5 118:10,22 118:24 126:20 127:2,14,14,20 128:14 129:12 134:7,17,22,25 147:9,24 148:6 148:11,17,23	149:2,4,20 150:6 151:14,16,20,24 152:6,8,8,9 153:8 154:4,7,9 154:20,25 155:2 155:11 167:24 168:23 169:6 170:8 171:2 172:7 174:8 175:10,11,13,23 175:24,25 177:3 177:9 178:2 179:8 187:13,15 188:19,20,22,23 189:22,25 193:4 193:9,14,19,25 199:19,20,22,24 200:24,25 201:10,11,12,17 201:18,25 202:5 202:9,13,14,19 202:21,24 203:14,18,20 204:8,10 207:13 207:17 212:19 213:4,8,10 219:11,15 222:7 224:16 couple 10:6 13:24 99:15 118:2 124:16 133:25 course 15:2 54:10 203:17 220:5 courses 78:9,13 court 1:2 5:18 7:6,12,18,20,25	8:21 10:10 32:17 50:19 60:4,10,12 72:4 78:2 81:4 111:18,22 122:2 122:9 147:13 221:2 court's 95:24 96:4 courts 121:5 211:24 covington 60:18 62:14 create 31:16 38:12 90:10,13 90:16 97:19,21 214:7 created 35:23 123:13 creating 94:9,19 creative 74:8,13 creek 171:4,4,7 190:8 192:4,10 criteria 77:24 93:18 94:4,8,18 148:5 149:8 151:20,23 191:5 199:9 209:14 212:10 216:2 217:8,9 criticism 198:20 198:23 criticisms 43:13 43:25 44:15 45:21 46:16 47:2 196:13 criticizing 198:24	critique 219:22 cross 41:13,20 44:9 46:10 crow 120:20 crum 4:11 8:12 218:17,17 cunningham 109:3,11 current 8:25 213:22 curriculum 51:20 56:24 223:19,20 customer 66:17 cuts 144:24 cutting 58:25 cv 1:4 51:2,6,9 51:10,14,24 52:4 52:6,11,25 53:9 54:16 56:21 59:17 cycle 16:12,17 17:13 63:20 71:22,22 77:22 123:11 124:19 126:5 cycles 124:16 cypress 161:21
d			
d 8:16 9:12 61:16 69:14,15 132:5 159:18 d.c. 2:8 3:20 dale 14:20 daniel 71:5 data 20:4,17,23 21:4,6 22:14			

[data - dichotomous]

Page 13

23:11 34:12 36:17 38:12 39:2,20 86:4,8 86:10,19 90:8 97:11,12 103:20 107:6,9,10 128:20 141:5,9 144:10 150:20 156:18,25 160:3 160:22 161:2 162:17 169:2 175:5,15 177:22 178:7 179:12 180:10 184:9 185:17 201:4 208:23 217:15 date 18:24 26:8 27:22 51:22 52:8 55:18 57:2 57:22 59:14 80:4,5 88:18 93:9 99:7 103:3 113:14 136:19 148:3 150:16 158:22 159:2 164:7 167:2 169:23 222:14 226:6 dated 26:6 27:21 166:22 223:15 223:17 225:5 dates 24:15,23 187:3 david 4:16 7:10 71:3 day 3:16 43:7 59:5 165:25 221:15 222:21	226:23 days 19:15 99:15 decade 15:2 decades 123:8 123:24 december 88:9 133:14 decennial 34:11 decide 73:19 193:25 decided 50:10 decision 72:9 113:10,12 114:24 115:11 201:23 224:13 decisions 32:18 32:19 95:24 96:4 203:24 declined 80:21 decrease 198:3 decreased 154:5 deep 202:13,20 203:20 defendant 2:14 22:4 24:8 64:10 defendants 1:12 1:20 3:6,17 4:6 8:9,11,13 21:20 22:3,10 24:8 27:3 64:4,9,13 65:16 80:15 218:15,16,18,22 defense 12:24 23:25 24:3 55:13,17 defer 218:14 defined 85:25	definition 77:7 138:17 139:9 degree 160:5 163:14 delamars 159:18 162:3 delaware 6:24 9:2 12:11 democrat 109:2 democratic 109:25 110:4,12 180:19,24 181:4 181:5 214:5 215:3 216:8 democrats 66:5 110:13 demographic 103:20 107:9 108:6,10 136:5 demographics 104:4,9,11,19 108:12 142:12 171:11,12 dennis 14:2 denominator 98:8 101:11,17 102:3 depends 110:2 deposed 11:17 11:19,25 deposition 6:4 6:17,21,23,25 7:21 9:19 10:5 10:11 11:23 12:6,8,15 18:20 18:23 19:8 25:18,21 27:4 31:4 32:12	38:23 55:12,21 79:18,22,25 80:6 82:19 83:6,20,25 84:5,7,16 85:4 107:9 143:5 150:23 167:5 210:17 223:14 226:6 depositions 11:22 12:4,5 196:5 derieux 2:19 3:24 describe 189:12 described 57:5 97:4,16 98:17 101:13 107:15 141:7 169:2 describing 173:14 188:5 description 173:11 223:13 224:4 225:4 descriptions 173:13 desktop 12:17 despite 116:17 determine 156:20 developed 88:5 development 162:20 diamaduras 3:13 6:2 8:10 218:20,21 dichotomous 197:7
--	---	--	---

[dickson - district]

Page 14

dickson 60:17 62:13 69:14 dickson's 70:8 difference 36:5 100:15 141:20 142:4 219:18 differences 90:20 125:13 173:14 different 15:5 35:10,22 61:23 65:19 101:5,12 102:14 110:14 115:9 118:23 122:21,22 123:16 124:15 126:20 134:8,14 165:8 202:2 214:3 difficulty 34:18 63:25 direct 18:7 41:22 42:2 90:19 direction 53:2 directly 70:24 71:13 74:3 165:12 169:7 175:17 178:11 184:22 disaggregating 161:2 disagree 122:3 disagreement 209:19 disastrous 185:11 disciplines 50:18	disclosed 16:6 83:23 disclosure 28:21 28:24 discount 73:4 discovery 189:9 214:14 discuss 79:15 80:9 83:19 122:6 129:10 153:10 194:8 discussed 16:22 17:24 85:2 109:17 115:13 134:10 178:25 185:23,24 203:19 discussing 36:21 137:8 181:25 discussion 15:10 19:16 50:23 59:10 154:24 187:20 188:8 189:14 190:19 193:23 219:12 219:16 220:21 discussions 15:7 17:2,5 79:24 83:17 disked 211:13 dispersion 177:15 disproportiona... 153:24 dispute 58:19 106:10 107:20 108:18 111:9 158:9	dissertation 55:13 distancing 7:24 distinctive 202:25 distinguish 204:13 distorted 121:20 distribution 214:3 district 1:2,3 7:6 7:7 89:11,12,19 89:20 90:14,17 90:21,22,24 95:17 96:17 97:20,22,25 98:3 98:12,20 100:2,4 100:7,11,18,23 101:9,11,15,16 101:18,25 102:10,10 103:11,13,24,25 104:16,24 105:3 105:11,17,22,22 105:25 106:3,3,7 106:7,9,9,17,22 106:24 107:2,2,3 107:3,23,25 108:15,16,20 109:22,22 110:7 110:8,14 113:23 114:3,4,12,25 115:2,7,10,14,15 115:16,16,19,21 116:13,20 117:19,21 118:9 118:19,24 119:5 119:8,9 120:8,10	124:24 125:16 125:18,24,25 126:11,20 127:7 127:15,19 128:9 129:7,10,14,21 133:21 134:6,8,9 134:18,20 135:6 135:11,13,21,22 138:25 139:14 140:4 141:13 142:9,21,25 144:22,23,24 145:3,16,19,21 145:22,24 146:2 146:3,5,6,8,10 146:11,13,21 148:10 150:13 151:3,13 152:12 152:13 155:20 155:23 157:2,3 157:14 158:6,6 159:23,24,25 160:20 161:18 162:9,9 163:3,3 163:4,5,9,9 169:13,16 170:11,11 171:17 172:8 176:15 177:3,12 177:13 178:21 178:22 179:23 179:25 180:20 182:2,21 183:19 183:20 186:7,10 187:4 189:15,16 191:2,10,15 192:6,6,11,12 193:5,10 194:6,6
--	--	---	---

[district - duchin's]

Page 15

196:24 197:17 197:23,24 198:4 199:19,23 201:6 201:7,13,14,25 203:8,13,15,25 204:2,16 205:14 205:15 208:4,20 213:22 214:6 215:4,11,17 216:9,18 224:18 districts 17:13 18:4,8 79:11 85:19 89:10,13 94:5,10,20 96:16 96:21,22 97:19 112:25 113:22 116:3,19 117:10 117:14,25 119:19 122:22 124:12 125:11 126:7 130:4 137:16,20 140:17 142:10 143:10,11 144:7 145:8 146:16,16 146:22 149:19 150:6 152:7 158:8 159:13 170:25 171:14 177:2 184:2 185:6 187:6 190:15 196:25 197:14 200:3 214:12 215:6 216:16,18 220:6 divide 90:25 division 7:8	divvying 213:20 document 19:17 19:18 25:3,25 32:12 38:24 51:18 93:4,11 94:24 95:3,4 98:24 99:8 136:20 137:5 147:25 150:24 158:23 164:12 164:12 165:19 166:20 167:6,14 documents 12:20,21 20:2,3 20:9,23 21:8,12 21:19,22,25 22:20 23:7,10 24:18 31:20 33:2,3 36:16 38:18,23 82:23 137:2 166:12 doing 15:5 29:5 123:14 138:24 144:19,20 158:2 214:10 doj 126:3,5 138:11,17 139:9 139:15 dorchester 152:8 188:24 double 22:13 82:5 139:25 doubt 15:24 40:5 42:2 48:18 downloaded 38:21 downtown 182:19,24	183:10 dr 36:22,23 37:11,11 38:5,6 38:14,20 39:8,9 39:11,12,12,24 39:24,24 40:8,9 40:9,13,13,13,15 40:19,19,20,25 40:25 41:2,2,5,6 41:6,10,10,10 42:5,11,17,20 43:2,3,9,13,14 43:23,25 44:16 44:19,24 45:3,5 45:8,19,22 46:3 46:5,17,23 47:3 47:16,17,19 48:11,17 49:5,8 49:10,13,17,20 49:23,23,25 91:24 112:14 113:19 114:7,10 195:12,16,21 196:3,13 198:5 198:19 199:7 200:22 203:5,10 203:12,23 204:4 206:20 209:18 210:2,6,12,16,22 211:12 212:3 214:7 215:11 216:17 219:21 draft 42:2 88:3 149:12 163:20 drafts 23:3 26:22 27:5 28:18,23 29:3	draw 17:20 62:10 63:8 126:6 173:4 175:6 189:10 204:23 215:9 216:14 drawer 173:16 drawer's 173:19 174:7 189:7 drawers 172:21 172:22,22,25 173:2,6 174:3 188:18 drawing 63:6 82:4 113:22 161:12 165:2 174:7 205:23 214:2,25 215:17 217:18 220:6 drawn 18:4,9 94:6 117:12 119:20 121:9 124:9 125:12 173:4 174:6 184:3 190:15 217:18 dressman 61:11 drew 172:23 dropping 216:16 duchin 39:24 40:8,13,19,25 41:5,10 47:17 48:17 112:14 duchin's 42:5,11 42:17,20 43:2,3 43:10,13,14 44:24 48:11
--	--	--	---

[due - et]

Page 16

due 7:20	197:13 219:20	emphasizes	engagements
duly 8:18 132:6	effects 76:9	92:12	66:14
222:13	efficient 198:13	employed	ensembles 214:7
e	efforts 94:16	222:18	ensure 140:2
e 2:2,2 3:2,2 4:2	eight 151:14,16	employees 169:7	entire 113:5
4:2 8:16,16,16	either 31:13	175:18 178:11	193:4,9 204:18
9:12,12 61:16,16	72:12 123:10	184:22	204:18 205:14
61:20,21 69:14	181:2 193:22	enact 135:14	207:11
118:17 132:2,2,5	196:2	145:25 146:11	entirely 12:2
132:5,5 159:17	elderberry 9:2	147:5 152:12	184:8
159:17,18	elect 125:25	enacted 85:14,15	envelope 200:24
167:16,16 222:2	126:7	85:15 86:6,25	201:11,17
223:11 224:2	election 4:7 8:13	87:9,10,22 89:8	envision 29:18
225:2	48:7,22 85:21	89:22 103:5	30:12
earlier 40:23	109:2 218:15,18	111:16 115:8	equal 114:19
75:25 89:2	elections 50:14	128:23,25 129:5	120:23 149:8
104:25 115:13	50:15 108:20	130:8 135:3,25	150:3
126:19 130:13	electronic 6:3	140:16,25,25	equally 200:25
133:15 155:19	21:3 221:4	141:17 143:9	201:19
189:5 191:8,9	electronically	144:6 145:20	equivalent 204:2
early 45:6 46:24	225:10	146:6 147:7	207:14
119:8 122:10	elicited 81:18	151:17,23,25	era 120:20
earth's 34:19	eligible 110:19	152:17,21 153:3	erase 124:10
easiest 59:23	110:24 153:24	153:12,18	errata 226:2
60:8	elizabeth 4:11	154:21,22	error 160:7
easter 26:18	ellis 140:18	155:10,13,21,22	161:4,8
easy 156:23	email 22:9 37:24	158:4,6 159:9	especially
edges 144:23	38:2,17 53:7,11	170:5 172:13	177:16
206:17	164:4,14,16,21	182:4 202:8	esq 2:9,19,21
edisto 208:2	165:24 166:22	enactor 173:16	3:13,22,24 4:11
editing 142:2	167:10,12	ended 45:25	essentially 72:8
edits 27:10,12,14	224:23 225:5	46:13,20 83:13	established
29:7	emails 22:22,23	engaged 65:20	123:5 143:5
educational	22:24 164:21	217:4	estimate 29:6
54:17	embedded 145:5	engagement	estimates 161:5
effect 5:16 85:20	145:10	65:8 67:19 69:2	et 1:7,11 7:4,5
85:21 86:2	emphasize 147:8	70:16 71:16	226:5

[etcetera - facts]

Page 17

<p>etcetera 156:2</p> <p>etch 124:10</p> <p>evaluated 126:25 128:4</p> <p>evaluating 78:16</p> <p>evidence 214:23 216:19</p> <p>exact 52:8 69:7 110:2 154:14</p> <p>exactly 29:15 64:6 92:5 149:8 149:15 150:3 157:3 160:10,14 203:23 204:3</p> <p>examination 1:18 5:14 9:4 41:20 132:8 218:24 223:7</p> <p>examine 75:23 150:21</p> <p>examined 8:19 200:13</p> <p>examining 76:14</p> <p>example 64:8 87:14 88:2,8 106:23 207:16</p> <p>exchanged 21:20 26:22 28:18</p> <p>exclude 206:22 206:25</p> <p>excluded 81:4,12 82:11 123:2,20</p> <p>excluding 72:3 123:18</p> <p>exclusive 94:14</p> <p>exercise 40:3 63:6 161:15</p>	<p>exhibit 18:16,20 18:23 19:7,12,24 25:24,25 26:3,4 26:7,13 27:18,21 27:25,25 28:12 28:15,20 31:19 36:12 51:19,21 51:24 56:7,23,25 57:18,19,21 59:7 85:7 88:15,17 93:5,8 99:3,6 102:22 103:2,4 107:12 108:13 108:13 113:11 113:13 116:11 133:8 136:15,17 140:10 144:2 147:20,23,25 150:12,15 158:18,21 164:6 166:21,24 167:9 168:21 172:17 195:10 220:3 223:13,14,15,17 223:19,20,22,24 224:4,5,9,11,13 224:14,16,18,21 224:23 225:4,5</p> <p>exhibits 12:16 18:25 19:13 29:12 30:3,8 31:4 82:24 150:22 167:5 225:10</p> <p>exist 201:14</p> <p>existed 97:25 163:24</p>	<p>exists 208:21</p> <p>exodus 108:14</p> <p>expect 54:17 148:11,12</p> <p>expected 54:24 130:13</p> <p>expense 24:6</p> <p>experience 43:18 45:14 47:7 50:9 57:6</p> <p>experiencing 11:5</p> <p>experiment 18:16</p> <p>expert 26:6,14 33:2 41:5 45:13 49:2 52:13 59:9 60:14 69:4 71:23 73:16,23 74:19 77:3,7,25 78:3 79:16 80:10,20,24 81:2 82:14 211:8,14 223:15</p> <p>expertise 48:9 50:6,8,13 189:21</p> <p>experts 31:10 36:22 39:23 47:11 80:17 82:21 86:13</p> <p>expires 226:25</p> <p>explain 101:4 121:3</p> <p>explained 157:7 157:9</p> <p>explanation 100:21</p>	<p>explanations 205:3</p> <p>express 29:21 42:16 43:8 50:4 139:2 195:20 210:12</p> <p>expressed 36:18 39:14 45:7</p> <p>expressing 30:12 172:24 189:6</p> <p>extensive 211:2 211:6</p> <p>extensively 79:7</p> <p>extent 18:11 31:6 41:13 47:18 48:3 204:22 205:18</p> <p>extremely 38:10 77:17</p> <p>eyeballing 125:2 135:5,10,19,23</p>
			f
			<p>f 114:10 118:17 132:2 222:2</p> <p>fact 8:4 59:4 65:17 74:18 162:20 204:13 214:14 215:6,16 216:15 217:12</p> <p>factor 33:16 75:9,16 113:21 205:25 217:19</p> <p>factors 73:17,25 74:6,15,20,24 207:19</p> <p>facts 20:4 22:13 23:10 36:16</p>

[failed - four]

Page 18

<p>failed 199:8,10</p> <p>fair 14:19 40:6 55:11 73:24 76:4 82:8 94:7 102:16 108:23 112:21 124:20 148:18 166:2 212:16</p> <p>familiar 9:25 47:19 48:10 49:4,13 73:12 88:10 108:19 137:24 138:19</p> <p>far 25:6 31:8 128:7 162:15</p> <p>fatally 208:18</p> <p>favorable 16:13</p> <p>favorably 143:10,14</p> <p>feature 212:20 213:8</p> <p>february 51:7,16 51:25 54:22 196:4 210:17</p> <p>feedback 188:10</p> <p>feldman 74:22 75:10 81:16</p> <p>fewer 150:4,5 151:16,24</p> <p>field 86:13 160:6 162:24</p> <p>fields 50:6,8,18</p> <p>fiffick 14:6 164:15,17 166:7 167:11</p> <p>fifth 24:4 143:8</p> <p>fight 82:9 214:20 215:23</p>	<p>figures 69:6</p> <p>file 89:25 90:7,9 90:11,11,13,17 165:22 166:3 167:15,17 182:8 182:13 184:9</p> <p>filed 7:5 20:11 28:7 40:8,13 51:24 54:25</p> <p>files 34:15 97:4 97:11 98:16 141:7 144:13,16 144:17 145:6,9 156:17 167:17 169:2,24 175:6 175:15 177:23 179:13,14 180:11,13 181:8 185:18,20,21,21 185:22 186:21</p> <p>filing 5:6</p> <p>fills 145:3</p> <p>filter 112:15</p> <p>filtered 22:22</p> <p>finalized 28:25</p> <p>financially 7:16</p> <p>find 75:11 149:13</p> <p>fine 221:4</p> <p>finish 11:13</p> <p>fire 109:5</p> <p>firm 7:11,13 67:9,10 69:17,18 70:8</p> <p>first 8:17 10:7 18:16 20:2 21:10 24:23 59:13 79:15</p>	<p>95:18 96:14 118:6 119:8 120:15 122:8,14 127:6 128:8 129:6,20 133:20 134:4 140:12 149:12 150:17 151:6,11 155:23 156:10,11 159:11,13,24 161:17 168:23 182:17,25 186:10 187:4 195:13 196:15 201:25 214:6 215:3 216:8</p> <p>five 27:9 29:6 47:11 69:5 89:12 91:4 168:7 176:9 197:19,25</p> <p>flat 34:21,25</p> <p>flawed 208:18</p> <p>flip 206:14,15</p> <p>flipping 206:18</p> <p>floor 2:16</p> <p>fly 42:13,18 44:6 45:24</p> <p>folder 12:16 19:14</p> <p>follow 190:10 193:3,8</p> <p>followed 74:12</p> <p>following 169:17</p> <p>follows 8:19 132:7 191:22</p> <p>force 5:16</p>	<p>foregoing 222:13,14</p> <p>form 5:11</p> <p>formal 77:24</p> <p>forman 4:5</p> <p>former 98:7</p> <p>forming 22:15 22:18 23:11,16 32:5,23 36:17 133:16 137:9,12 163:19 217:7</p> <p>formulating 32:2,9 37:12 38:7 39:14 153:16</p> <p>fort 181:11</p> <p>forth 29:22 30:25 31:9 94:4 104:12 107:4 156:3 195:22 206:19 210:13 219:8</p> <p>forward 53:10 53:13 119:12 122:5 125:4 126:23 208:17 217:13</p> <p>forwarding 164:15,16 165:20 167:11 167:12</p> <p>found 78:3</p> <p>foundation 28:11</p> <p>four 143:11 144:8 145:15,20 145:25 146:6,11 146:21 152:13</p>
--	---	---	--

[four - going]

Page 19

171:12 fourth 22:8 100:2 117:21 148:25 framing 20:5 190:12 frankly 208:14 freedman 2:9 8:6 9:5,7 18:15 19:4 26:3 27:16 51:18 52:23 53:15,18 56:3,19 57:13 88:14 93:3 99:2 102:21 113:8 130:12 132:9 136:14 147:21 150:10 158:13 158:17 163:25 164:10 166:19 168:6,9 188:9 192:17 194:11 194:18 217:23 218:8 219:8 223:8 front 26:10 28:3 219:5 full 9:9 10:25 11:6 182:17 194:15 195:14 210:4 fundamental 209:19 funded 64:25 66:9 funding 64:20 67:15 68:18,22 70:4,12	funny 149:5 furnish 53:4 further 5:9,13 132:7 218:9 220:12 222:17 future 46:5 g g 61:20 159:19 gain 101:25 gathered 20:11 gears 111:11 132:23 146:25 155:14 163:18 168:3,3 194:9 general 47:21 64:17 71:2,7,8 96:2 113:20 212:14 217:10 general's 70:25 71:13 generally 48:12 78:15 109:25 111:16 143:16 145:11 172:6 generate 169:21 175:2 177:19 179:9 180:7 184:5 185:14,18 geographic 90:8 189:17 190:16 191:3,4,15 192:11 geography 77:3 77:9,17,25 78:4 78:8,11,17,20,24 79:5 157:11 180:6 183:25	189:22 190:6 205:21 georgia 118:10 118:20 127:21 129:12,17,22 134:7,13 gerrymander 112:24 gerrymandering 50:15 59:22 60:5 62:6,12,14 62:15,20,25 63:10,19 73:7 111:19,23 112:5 113:18 114:5 115:3 211:14,21 gerrymanders 62:11 getting 16:12 123:21 164:20 167:4 187:17 188:10 gibhans 159:18 159:19 give 10:24 13:10 13:24 15:24 27:8 38:10 42:24 44:6,12 46:7,14 47:17 63:25 77:8 82:5 91:2 107:18,19 119:18 121:7 160:4 164:8 180:5 196:2 given 42:8 44:21 76:16 110:11 160:20 205:7 220:16	gives 95:15 177:14 179:24 giveth 102:8 giving 11:6 74:5 112:10 160:8 go 6:19 33:13 35:2 36:10 42:19 43:18 44:19 48:8 95:8 95:10,22 105:7 105:14 106:13 114:6,15,16 119:3 125:5 130:15 133:8 143:6 153:10 188:9 194:16,19 194:20 205:16 207:16,20 217:24 218:16 goal 72:13 goes 49:2 74:11 76:9 128:13,15 178:3 201:5 202:13,16,20 203:19 going 6:8 18:19 26:4 27:16 42:23,25 46:18 50:19 56:4,10,23 57:16,17 74:9 77:20 83:3 85:20 91:8 102:2 103:18 111:12 118:4 119:7 130:3,19 141:24 142:15 144:3 162:19 168:12 175:22
---	--	---	---

[going - hook]

Page 20

188:12 189:9 194:9,12,23 208:17 210:9 211:4 213:8 214:21 215:24 218:4 good 6:7 9:6 38:9 113:2 130:14 168:2 174:17 204:25 gore 3:22 6:5 8:8 17:14 19:10 21:14 22:4,23 23:2,20,23 24:20 26:24 27:3 28:22 29:7,16 37:23 50:21 52:24 53:6,17 73:19 75:18 79:20 80:8,11 82:22 83:4,5,16 83:21 164:8,11 218:13,23,25 220:12 221:2 223:9 gotten 86:7 140:17 government's 7:23 graduate 55:2 graham 61:25 63:16 gray 169:13,17 great 53:5 138:9 188:3 greatly 197:14 green 177:11 178:20 202:2	greenland 35:17 greenville 3:10 117:22 125:19 ground 10:2 group 16:11 guess 18:13 52:2 74:7 77:22 78:12 80:2 91:20,24 135:15 176:16 211:5 213:6 214:13 guessing 125:2 guide 94:5 guideline 215:7 216:12 217:5,14 217:21 guidelines 93:7 93:18 94:2,15,17 95:25 147:16,18 186:13,15,24 191:6 212:10,15 220:2,5 224:5 h h 60:22 61:16,16 61:16 159:17,19 223:11 224:2 225:2 h18 139:20 half 194:17,19 hall 61:9,9 62:24 188:19,20,22,23 hampton 173:7 hand 144:15 145:8 222:21 happen 201:9 206:21	happened 21:11 23:18 97:15 123:8,24 132:19 133:24 172:2 173:11 happy 53:9,12 harbor 190:7 192:4,9 202:17 hard 135:19 harkenrider 61:15 63:9 68:6 harper 61:9 hayes 92:6 head 96:10 181:15 213:15 hear 187:24,25 heard 73:10 hearing 33:7,13 33:19 34:9 hearings 33:20 34:2,5,10 heart 202:13,20 203:20 hedged 134:2 heights 73:9,13 73:16,25 74:6,15 74:19,24 75:8,16 76:13 held 1:21 6:21 112:11 help 26:21 28:17 110:5 helpful 31:7 53:14 75:12 122:5 150:9 hereof 222:20 hereto 5:6	hereunto 222:21 hey 204:14,16 hide 158:12 high 89:8 91:21 92:8,8,10,15,19 92:24 higher 102:11 105:4 142:21 214:4,13,25 215:10 216:7 217:15 highlighted 19:2 hill 159:16,17,22 161:24 hired 64:6 hispanic 105:9 138:16 140:3 historical 117:8 118:4 119:19 121:8 127:12 133:19 134:10 historically 117:2 119:2 121:10 127:19 history 76:15 87:11 125:10 hoc 93:17 hochul 61:15 63:9 hold 171:5 192:24 holtzman 15:12 home 12:10 91:5 168:10 honestly 123:19 hook 202:25 205:15 212:19 213:3 219:11
---	--	--	---

<p>hopefully 168:10 hopped 120:3 horrifyingly 121:20 hour 56:4 57:10 83:12 194:17 hourly 24:10 25:2 hours 42:25 44:18 58:5,11,15 58:22 house 3:6 8:11 34:5 51:8,17 52:2 54:23 79:18,22 80:6 84:11 88:4,8,16 88:20,21 93:7,15 94:8,17 99:4,23 100:22 101:7,22 103:16 113:22 114:18 115:23 133:5,10,12 135:12,24 136:7 136:9,25 137:5,7 137:12,21 142:24 150:13 150:20,25 151:4 151:21 152:5,19 153:5 158:19 159:7 186:21,24 191:6 198:20 212:10,14 216:24 217:9,14 218:15,21 223:24 224:9,18 224:21 hub 86:8,10 97:11 107:10</p>	<p>156:18 hull 143:24 hundred 191:14 hundreds 35:20 121:24 husted 81:25 i idea 41:11 68:11 166:10 198:17 identification 18:24 26:8 27:22 51:22 57:2,22 88:18 93:9 99:6 103:3 113:14 136:18 148:2 150:16 158:21 164:6 166:25 223:12 224:3 225:3 identified 32:10 50:8 62:4 95:23 208:8 identify 22:13,16 24:10 33:6 44:15 46:16 59:21 94:17 207:8 ii 22:13 85:17,25 114:17 159:17 159:19,22 161:24 170:20 176:13,22 iii 22:16 illustration 183:25 imagine 144:21</p>	<p>imai 36:22 37:11 38:20 47:16 210:2,6,12 imai's 38:5,6,14 39:8,11,12 47:19 210:16,22 211:12 212:3 214:7 215:11 216:17 219:21 impact 109:20 208:11 209:7 implications 162:22 important 62:12 77:17,19 205:22 216:13 impressions 44:11 improve 110:14 187:5 improves 186:6 187:9 improving 186:9 inaccurate 35:18 inactive 85:11 132:25 inaudible 160:12 188:7,21 192:13 inbox 22:21 inclined 44:11 include 37:4 43:17 52:19 54:12 82:13 122:8 176:19 185:9 193:18,21 194:2 203:7 208:8 220:24</p>	<p>included 29:19 30:13 33:11 90:3 122:11 123:17 179:20 204:15,17 212:10 including 21:2,4 24:9 158:11 174:2 201:24 208:13 increased 154:5 197:21 incumbency 94:23 186:20 incumbent 186:22 indentation 181:21 indention 181:21 independent 60:15 196:22 index 223:2 indicate 57:9 indicated 222:14 indicates 172:18 indicia 82:6 indirectly 169:7 175:17 178:11 184:22 individual 144:7 204:8 individuals 47:12 80:16 111:8 142:6 174:22 inference 173:5 215:14</p>
--	---	---	---

inferences 174:5 189:10 204:23 216:14 infirmities 196:15 infirmity 196:15 information 24:9 32:22 38:12 96:25 137:15,25 144:10 156:15 189:19 informed 43:15 83:23 initial 28:7 32:10 39:18 40:17,19 41:15 80:4,5 167:3 195:24 210:8 inputs 216:3 inquiry 92:2 insanely 149:13 insert 200:23 insight 180:5 instances 82:17 institute 60:20 62:17 institution 54:13 institutions 54:7 instructed 104:18 intact 121:23 191:23 199:14 199:23 integral 63:13 integrated 63:7 intend 29:14 30:9,17 40:7	41:3 184:4 195:15 210:5 intended 94:13 96:19 106:19 178:23 183:22 intending 156:4 174:14 180:3 intends 29:16,17 intent 76:5,10 162:16 172:25 173:19 174:7 183:4 189:7 intention 41:16 195:25 intentions 31:17 42:3 76:24 interest 33:12 122:18 147:15 186:16,18 189:24 199:13 interested 7:16 123:7,23 165:9 214:15 215:21 interesting 117:7 121:7 122:2 196:9 interfere 6:16 interference 6:13 internet 82:3 interpret 21:6 138:7 interpretation 112:11 interpreting 141:12 intrinsically 101:23 102:8	introduce 18:19 26:4 27:17 29:16 51:19 56:23 57:17 93:5 99:3 102:22 113:11 147:22,23 150:12 158:18 164:3 166:21 introduced 19:7 19:17 27:24 51:23 147:20 intrudes 126:16 invalid 201:17 inverse 143:23 invoice 24:19 25:5,6,14 38:3 57:15,20 58:4,9 223:22 invoices 24:5 68:14 70:10 involved 62:5,9 62:20,21,25 70:21 164:25 165:14,15 involvement 24:13,22 issue 60:5 203:5 207:12 issued 25:6 issues 202:2 item 20:9 21:8 21:25 22:8,20 24:18 148:5	jackson 181:11 james 3:8 jason 15:13 jasper 152:18,22 152:23 188:25 jay 13:18 jealous 217:11 jessamine 167:15,17,19 jim 120:20 job 151:22 joe 109:2,10 156:25 157:17 jogs 13:11,25 john 2:9 3:22 9:7 53:6 164:8 jones 3:16 59:5 jordan 3:7 13:18 judge 75:11 82:2 judiciary 33:21 33:25 93:16 july 1:14 6:9 33:21 226:6 june 196:4 jurat 220:24 jurisdictions 15:21,23 16:21
			k
			k 8:16 61:16 69:15 132:5 katie 109:4 kaye 2:5 keep 68:17 194:11 201:23 203:24 keeping 122:19 199:13 200:18

[keeps - levy]

Page 23

keeps 126:11 127:5 128:7 133:20 134:17 134:21 kentucky 70:18 70:19 167:24 kept 119:4 120:7 124:23 127:24 134:13 191:23 199:19 200:4,5 201:5,6 killed 69:3 kincaid 14:16,17 16:20,22 17:3 164:17,24 166:6 167:13 kind 35:15 55:7 72:14,21 92:3 117:10 123:4 124:10,16 141:23 161:10 217:11 kirkland 140:18 know 11:10,17 14:17 15:25 16:7 17:14 20:14,19 21:15 21:24 22:2 23:18,20 24:2,17 27:2,7,12 28:23 29:15 34:8 40:11,12 41:24 43:3 47:10,14 55:10 59:4 61:18 62:11,16 63:4 64:5,7,8,18 64:20,24 65:4,6 65:9,18,20,24,25	66:3,7,8,12,18 67:2,3,14 68:6 68:17,18,21 69:7 69:12,16 70:3,4 70:11 74:4,12 75:19 76:14 77:5,19 80:15,18 80:19,22 90:6,20 92:5,5,7 94:11 94:13 95:12 112:21 113:3,5 117:23 120:14 121:20 122:22 124:25 125:18 126:2,4,8 128:13 128:14,17,21 132:18 135:2 136:24 138:14 145:4 148:12 154:14 156:24 157:3 160:17 162:13,19 163:23 165:5,12 166:14,15 172:10,14,14 174:18 176:21 176:24 178:25 181:14 182:7,23 183:7,9,13 184:3 189:8 190:2 191:7 192:18,21 192:25 195:17 196:22 197:4 198:8,10 206:5 206:15 207:18 208:12,14 210:8 213:9 215:11 217:17	knowledge 18:7 28:22 32:11 163:16 166:11 167:18 konstantine 3:13 218:21 I I 5:2 41:6 60:22 61:16,20,21 159:18 labeled 88:20 102:25 136:17 138:11 139:19 150:14 158:20 164:5 165:20 166:24 224:7,15 224:16,19,22,25 225:8 labels 185:10 laid 196:21 lake 170:20 lamone 61:21 63:14 language 54:23 55:5 191:10 203:9 large 161:19 211:5 216:11 largely 117:15 larger 145:15 latest 52:3 latitude 36:7 law 67:9 112:13 lawyers 64:15,18 65:17,19,21 214:21	lead 216:4 league 61:5 63:21 leaning 180:19 180:24 181:4,5 left 172:10 182:14 legal 74:8 76:11 77:5,6,6,12 112:10,16 114:9 173:5 215:23 226:3 legislative 13:21 34:5 61:24 75:23 76:3,5,15 86:17 87:18 88:4 93:19 113:3 130:6 133:3 162:16 163:21 186:9,14 187:8 217:11,21 legislator 214:23 legislators 64:16 130:7 214:2,9,25 216:6 legislature 13:7 18:2,13 142:20 162:17 169:8 175:19 178:12 184:23 187:3 legitimate 200:3 209:13 lengthy 44:4 letter 90:5 level 47:13,15 69:18,19 89:21 levy 1:22 7:13 222:10,25
--	--	---	--

[lexington - making]

Page 24

lexington 199:19 199:22	lists 182:8	99:20,25 102:9	lot 59:16 65:15
liberties 2:12	literature 92:18	102:17 103:10	117:24 126:4
liberty 173:7	92:23 201:16	104:14,18 105:8	139:3 187:17
lightning 149:10	litigation 72:11	105:25 107:12	199:18
limestone 176:13	72:13	107:25 111:3,14	lots 160:21
176:22,22	litigations 72:7	112:13 113:9	louisiana 3:19
190:20,20,22	little 56:4 59:24	117:18 125:3	low 125:14,23
limit 202:5,9	111:12 132:24	129:23 136:8,10	lower 116:2
limited 24:9	152:2 156:10	139:12 148:4	154:17,19 214:5
114:14	157:5 163:19	158:14 161:16	215:2 216:7
lincoln 159:19	185:25	171:3,10 179:3	lucas 3:8
162:5	liu 39:24 40:9,13	181:19 190:9	lucky 149:6,13
line 36:3 63:24	40:19,25 41:6,10	205:11 215:15	172:2
90:10,13,16 92:2	43:23,25 44:16	looked 76:17	luke 3:18 13:12
100:3 123:22	45:3 49:23	77:20 104:10	lumps 35:2
148:25 169:12	liu's 44:19 45:5	124:22 127:5	lunch 130:15,22
174:8 176:17	45:8 49:13,17,25	128:7 141:25	m
189:16 226:8	live 41:25 170:3	201:3	m 4:11 61:21
lines 106:18	lived 163:8	looking 38:22	159:18 167:16
112:3 121:12,14	lives 165:12	53:7 91:5 101:8	mace 109:9
121:16,17	liz 218:17	102:14 104:23	110:9 186:22
122:16 155:21	llc 3:5	120:5 122:23	214:16
169:13,16	llp 2:5	127:13 138:9	mace's 109:23
177:12,12,13,13	locales 128:21	143:21 150:19	main 3:9 4:8
178:20,21,21,22	located 6:24	151:19 153:21	212:5
179:23 180:2,17	12:9	154:4 157:6	major 213:16
183:19 190:14	location 138:25	158:5 162:15,21	majority 176:25
191:22	205:23	169:10 171:6	makers 203:7
list 15:25 31:24	lock 198:12	172:18 182:12	making 34:20
32:4 36:16 46:2	lodge 207:21	189:20 197:12	35:6 37:6 40:2
46:14 59:13,21	long 83:11	203:14 207:19	72:9 110:13
93:20 94:14	130:16	209:10 213:11	143:20 173:18
159:12	longstanding	213:13	174:6 187:14
listed 33:15,23	117:23 123:5	looks 126:15	188:18,19,22,23
52:17 81:15	look 31:6 32:25	129:15 203:14	189:5 202:2
93:20 94:21	38:24,25 53:19	203:18	216:4
178:7	53:22 56:6 76:2	loop 9:2	
	85:6 90:20		

[man's - mean]

Page 25

man's 206:14	172:25 173:2,6	165:7 166:5	86:12 93:21
map 18:9 20:6	173:14,16,18	179:20 185:3	159:4 166:3
34:6,21 35:24,25	174:2,7,11,11	205:23 214:3	167:4 195:9
51:17 63:6,8	175:2,6 176:2	216:12 217:18	math 58:14,18
82:3 85:11,14,15	177:5,7,19	217:18	106:11 108:18
86:2,6,21 87:10	178:14,15 179:9	margin 161:4,8	111:5,10
88:17,21 89:8,18	179:12,18,18	marginal 215:18	mathematical
89:22 90:18	180:8 181:19,23	215:20	49:3
111:16 112:23	182:5 183:16,16	marginally	mathematician
113:5 117:3,6	183:18 184:5,25	197:21 204:15	48:17
118:7,8,14,23	185:2,14 188:18	mark 136:14	mathematics
119:13,16,17	189:7,20 190:9	marked 18:23	48:5,19,24
120:5,6,19,19	191:25 192:3,8	26:7 27:21	matter 7:3 13:2
121:19,22 122:6	192:20,23 193:2	51:21 56:25	15:6 16:4 30:5
122:7,9,9,11,14	193:7,15,19,22	57:21 88:17	58:6 59:4 60:19
123:10,11,15	193:24 202:4,5,8	93:8 99:5 103:2	60:21,23,24
124:2,4,21 125:6	203:7 204:19	113:13 136:17	61:17 64:6,23
125:9,13 126:9	212:20 213:3,10	147:25 150:15	65:17,22 67:8
126:10,10,18,24	213:12,13,22	158:20 164:5	68:13 70:23,24
126:25 127:4,11	215:17 216:4,22	166:24 195:10	79:24 82:8
127:22,22,23	216:24 223:25	maryland 63:14	83:22 84:2,23
128:2,3,6,6	mapmaking	69:8,19 70:16	166:7 205:25
129:16 130:9	34:19	117:10 119:21	matters 16:5
132:25 133:10	maps 16:12	121:12 124:14	59:12,22 60:7
133:12,18 134:5	17:20 35:14,23	massachusetts	61:7,12 62:5,8
134:16,21 135:3	70:20,20 76:9	2:7	71:23 72:12
135:3,8,12,13,14	87:11 89:25	match 98:4	82:10 86:14,16
136:6,7 137:7	98:5 116:8	108:4 157:11,18	86:18 197:14
141:2,17 145:20	117:8 118:4	matches 90:25	mbs 1:4 7:9
145:25 146:6,11	119:25 120:14	215:9	mc 206:14
147:5 148:10	120:15,18,19,22	material 20:16	mcdonald
152:17,21 153:3	121:4,8,21	27:19 86:16	113:19
153:12,18	122:14,21 124:8	materials 12:14	mcdonald's
154:21,22	124:21 126:19	20:3,12,19,23	114:7
155:10 158:4,7	127:5,12 133:2	21:19 26:2 31:3	mcmaster 62:2
165:2 169:10,11	133:19,21,25	31:25 32:5,22	63:17
169:19,23	134:10 142:20	36:11 39:2	mean 34:17 37:8
172:21,21,22,23	163:17,20,24	57:25 84:9,19	53:21 72:6 74:6

[mean - name]

Page 26

85:22 89:15 92:13,14 95:20 111:22 112:17 115:13 118:11 120:18 142:23 143:13 149:3,9 160:8 166:8 172:22 179:3 185:21 196:20 199:15 202:12 209:12,16 meaning 92:9 112:19 211:5 means 138:14 139:23 meant 143:15 173:10 measures 143:12 143:22 145:15 145:20,25 146:6 146:11,17,18,21 meat 214:20 215:23 media 6:22 56:11,17 91:9,14 130:20 132:12 168:13,18 194:24 195:5 220:18 medications 11:4 medium 69:18 meet 83:5 member 13:6 122:17 members 18:12 142:19 169:8 178:12 184:23	memory 13:11 13:25 mention 39:23 142:10 190:19 220:5 mentioned 79:9 mentions 147:13 mercator 35:13 36:8 messed 172:3 met 68:8 69:21 70:2 83:7 methods 160:6 metric 135:18 metrics 144:8 michael 113:19 microphones 6:10,16 middle 139:19 midway 178:3 181:11,18,22 migration 106:6 mind 10:13 16:25 32:13 44:23 minimizing 147:19 148:6 151:20 minimum 148:13 149:2,4 149:21 mink 4:17 minor 128:25 minority 63:12 minute 217:24 minutes 53:20 83:14 91:4	missed 81:13 misspoke 49:24 modeling 55:22 modest 111:17 modify 47:7 moment 46:13 monday 53:12 83:9 montana 12:2 monte 206:15 months 43:8 monticello 203:24 205:12 205:13 206:22 206:25 moon 149:23 morning 6:7 9:6 83:9,10 mother 167:25 move 43:18 119:12 125:4 156:7 181:3,4 197:8,20 204:9 204:11 205:8,12 moved 104:12 105:21 106:3,8 106:25 107:3 108:15 115:14 115:15 157:4 163:2,4 169:14 170:7,11,21,24 171:9 174:23 177:18 179:22 179:24,25 180:6 185:5 movement 155:20	movements 106:17,22 moves 157:2 196:24 197:3 206:13,13 moving 21:18 109:21 110:6,7 110:13 122:5,19 126:23 139:18 208:16 mullins 64:23 65:23,25 multiple 14:25 65:16 68:4,7 69:11 86:18 211:24 municipal 148:23 municipalities 199:14 murphy 3:7 myriad 199:8 n n 2:2 3:2 4:2 5:2 8:16,16 9:12 60:22 61:16,21 69:15 132:2,2,2 132:5,5 159:19 167:16 222:2 naacp 1:7 7:4 61:25 63:17 81:25 226:5 nad 35:20,21 36:6 name 7:10 8:22 9:7,9,10 61:19 66:21 69:14,20
---	--	--	---

[name - offset]

Page 27

71:4 226:5,7 named 64:10 names 13:10,25 67:13 68:17 nancy 109:9,23 110:9 186:21 214:16 narrative 186:2 narrow 59:23 narrowed 50:10 national 14:12 15:11 16:7,16 17:6 64:24 66:8 67:14 68:21 69:17 70:11 72:15,18,22 163:22 165:2 natural 137:22 189:17 190:6,16 191:4,15 192:5 192:10 naturally 35:3 ncld 61:8 nclev 62:24 necessarily 114:8 142:14 necessary 58:3 need 7:21 10:14 10:18 53:21 55:15 148:15 168:4 195:8 221:4 needed 38:11 needs 63:11 negative 36:25 nelson 64:23 65:22,25	net 106:6 108:14 109:21 never 22:2,6 68:8 69:21 70:2 144:24 160:17 165:23 166:11 new 1:23 2:17,17 7:11,14 16:25 31:8 67:21 69:2 85:18 89:20 90:18,25 101:8 101:16 140:25 155:21 165:7,15 169:16 177:12 178:20 183:19 220:20 222:5,7 newer 51:9 nexsen 3:5 nh18 138:11 139:10,15 nhdoj 105:15 nhwht 105:9 nice 128:10 nichol 60:22 62:18 nine 182:20 183:2 non 21:3 79:3 105:9 north 60:18 65:12 66:10,14 181:11 northwestern 117:20 notary 1:23 5:15 8:18 222:11 226:25	note 6:9 19:11 81:11,11 108:25 129:5 154:8 155:2 181:10,24 noted 7:17 152:11 221:6 notes 12:21,22 25:19 222:16 notice 1:21 18:21,22 19:8 38:24 223:14 noticed 175:21 november 164:16 167:13 number 6:22 7:8 19:5,18 56:11,18 58:9 91:9,15 96:18,23 98:15 100:16 109:14 109:14 110:17 130:20 132:13 138:24 145:15 147:5,9 148:10 148:17 149:2,4 149:19,20,21 150:6 151:12 153:14,22 154:4 160:19 167:9 168:13,19 194:24 195:6 220:18 numbers 97:8 107:11,14,24 108:2 115:25 116:2 139:6,25 151:12 numeral 85:17 85:25 114:17	220:10 numerator 98:7 nut 183:6 nw 2:7 3:19 o o 5:2 60:22 61:16,21 69:15 118:17 132:2,2,2 222:2 oath 10:8 132:15 132:21 objections 5:10 46:3 objective 173:10 observation 127:18 199:7 observations 118:7 obvious 201:22 obviously 35:18 62:9 77:16 124:17 125:12 125:23 186:21 213:14 offer 29:14 30:17 40:7,18 41:8 195:15 210:5 offered 78:10 114:25 offering 29:18 office 12:10 70:25 71:13 official 66:21 71:9 offset 198:12
---	--	---	--

[oh - outcome]

Page 28

oh 33:5 184:19 186:20 187:7,16 187:24	124:20 125:4 127:11 128:2,22 130:11 132:23 133:11,18 136:3 137:4,14 139:5 139:12 140:8,11 141:11 143:6,7 143:25 144:9 145:12 146:20 146:25 148:21 150:24 154:6 155:14 157:16 158:16 161:16 163:18 165:19 166:18 168:8 171:10 172:19 174:10 175:8 177:5 179:9,17 180:7,15 181:9 181:24 182:16 184:16 187:11 187:22 188:16 191:8 192:2 194:9 196:3 199:6 213:19	once 11:25 ones 16:24 19:2 59:21 70:9 124:7 162:10,11 207:22 216:23 online 86:11 136:23 open 12:17 19:19 31:18 35:16,24,25 45:25 46:13,20 88:22 91:25 136:25 opened 84:14 150:19,21 159:3 opening 40:10 58:15 107:8 159:2 169:3 178:8 opine 74:14 130:2 opined 113:20 opining 73:25 76:5 opinion 40:14 42:22 47:22 49:10 81:22 82:2 85:8 89:6 111:15 172:24 189:6 191:13 212:2 217:7,22 opinions 20:5,25 22:15,18 23:12 23:16 29:13,16 29:19,22 30:5,12 30:16 31:8 32:2 32:6,9,23 33:4 36:18 37:12	38:8 39:14 40:7 40:18 41:8 42:5 42:9,10,17 43:9 44:7,22 45:2,7 45:13 47:23 48:3,8,14 49:9 49:18,19,25 50:4 71:23 85:7,9,10 86:24 87:7,16 89:5 93:23 96:6 99:17 111:13 123:12 133:16 136:4 137:9,13 143:7 147:3,13 151:8,8 153:17 163:19 195:15 195:21 210:4,12 219:21 opportunity 81:23 opposed 119:20 159:24 orange 34:24 orangeburg 134:22,24 153:4 154:25 155:2,11 175:10,11,13,23 175:25 177:3,9 177:15 190:19 190:25 193:13 order 7:23 43:16 43:19 45:11,15 47:5,8 221:3 ordering 6:3,5 originally 79:23 osah 2:21 outcome 7:16 183:5
ohio 6:25 9:3 12:11 54:14 61:5,5 63:21,21 64:11,17 78:11 117:13 119:23 121:14 124:13	old 89:19 90:24 97:22 101:15,18 102:9 109:13 119:24 140:22 155:21 169:13 177:13 178:22 179:22,25 183:18		
okay 11:9 19:20 20:22 21:18 22:8 23:9 27:15 28:15 31:18,23 32:16 33:17 34:14 35:8 36:9 36:14 37:6 39:11 40:16 41:18 42:4 45:4 45:18 46:22 50:3,25 51:23 52:22 54:5,16 58:13,20 59:6,20 61:13 63:18 65:11 66:16 67:21 70:18 71:8,20 72:14 73:6 75:15,22 77:23 79:8 82:18 85:22 88:24 89:4 91:3 95:22 96:11,19 97:14 99:16 101:4 102:16,20 106:12,19 108:5 111:11 112:8,21 116:6 117:4 119:12 122:4 123:4,9,25	oldham 14:20,24 15:8 olympia 203:25 olypmia 206:22		

[outline - people]

Page 29

outline 196:12 outlook 22:21 output 38:6,6,15 39:13 215:5 216:14 217:21 outside 15:12 43:19 overall 104:7,15 130:3 143:16 214:4 overlay 179:7 overlooked 82:15 oversight 59:19 overwhelmingly 110:12	109:17 111:13 111:14 113:16 113:16 114:6,15 114:16 116:11 116:16 117:3 118:14,14 119:13 124:2 125:5 126:24 128:3,24 140:9 140:10 142:8 143:7,25 147:3 148:4,19 151:11 152:14 153:9 154:7,25 155:4 155:15 157:9 159:11,11 168:21 169:10 170:2 172:20 174:10 175:9,11 176:8 177:5 178:3,4,14,16,17 179:18 180:16 181:10 182:17 183:15 184:14 184:14,25 186:3 188:16,17 189:15 194:7 195:12,13 196:12 200:22 203:22 210:2 212:9 213:25 219:4 220:9,10 220:23 223:5,13 224:4 225:4 226:8 pages 31:19,24 101:10 184:13 210:3 212:8	paid 24:7 65:7 66:13 67:7,9,18 68:12,25 70:7,15 71:12,15 paragraph 85:16 148:22 172:19 173:6 182:17 186:3 189:19 paragraphs 174:23 paralyzed 149:17 park 173:7 part 10:19 39:6 75:3 94:22 216:11 partially 190:24 participate 17:16 participated 17:11 participation 52:18 54:10 75:4 particular 69:24 88:7 103:23 112:25 170:17 173:20,25 190:11 214:6 particularly 75:12 parties 5:6 6:19 7:24 partisanship 156:8 party 7:15 16:14 66:4,18 67:22 69:9 70:22	222:18 passing 13:3 passive 173:24 patrick 1:19 8:5 8:24 9:11 14:2 221:12 223:6 226:7 pause 27:23 31:22 54:2 68:2 93:10 95:13 98:25 102:19 111:6 116:14 124:3 125:7 132:17 135:9 136:13 148:20 158:15 168:5 187:19 192:14 pedantic 38:10 peel 34:23 peer 53:25 54:4 54:8 78:25 79:3 92:18,22 201:15 211:3,7 pending 11:13 peninsula 134:3 190:3 191:23 pennsylvania 16:4,25 66:16,22 67:12 119:25 121:19 124:14 165:16 people 22:7 100:19 105:21 106:2,7,8,25 107:2 108:15 109:21 110:7 115:9,14,15 123:6,22 138:16
<p style="text-align: center;">p</p>			
p 2:2,2 3:2,2 4:2 4:2 5:2 8:16 26:15 28:14 132:5 p.m. 130:22 132:3 188:12 220:15 221:6 package 164:20 167:4 page 19:24 24:23 24:25 32:16,17 33:6 34:14 57:9 58:9 59:11,11 60:3,25 61:8 65:12 85:9 87:20 88:20 89:6 93:21 95:11,11 96:12 96:13 99:20 103:9 106:14,14			

[people - political]

Page 30

139:3 149:15 160:21 161:21 161:25 162:3,5,7 162:23 163:7 197:25 peples 208:2 pepper 68:16 percent 75:6 89:11,12,13 92:13 98:12,21 100:8,12,15,16 100:24,24 101:2 102:4 103:13 105:4,12,17 110:4 115:22 138:11 139:4,8 139:15,16,20,20 140:5,14 141:14 141:18,22,23 143:2,3 154:10 155:3,6 157:23 197:18,22 215:12 216:17 217:16,19 percentage 89:18 91:22 92:15,19,20 100:17 105:10 105:16 145:2 196:18 198:25 percentages 89:9 89:10 91:2 198:16 perfect 94:11 performance 215:3 216:8 performances 214:5	performed 24:16 24:24 38:5 perimeter 135:18 period 49:12 periods 219:9 person 77:10 160:17,18 personal 47:13 186:3 personally 80:23 217:20 persons 105:11 105:16 110:19 149:11 ph.d. 54:18,25 55:8 78:12 phase 20:6 philip 60:20 62:16 phones 6:14 phrase 148:16 148:24 202:25 physical 180:6 physically 12:9 pick 6:11 picking 207:4 piece 34:22 pieces 118:3 pig 166:8 place 6:15,18 7:22 119:22 placeholder 55:23 plaintiff 82:21 plaintiff's 31:10 36:22 39:23 61:19 68:5	69:12 plaintiffs 1:8 2:6 7:2 8:7 9:8 47:11 67:25 68:7,8,9 69:22 69:23 81:23 112:22 113:17 114:2,17,24 218:8 plan 17:24 85:12 85:15,23 86:2,25 87:2,9,9,10,12 87:21 88:8,10,22 88:25 89:23 99:23 103:5 111:18 112:4 114:3,18,18 115:8,21 116:3 128:19,23,25 129:2,5 130:9 133:10 135:12 135:24,25 136:9 136:25 137:7,12 137:21 140:6,25 141:14 143:17 144:6 145:22 146:3,7,12 147:7 147:7 150:14,25 151:5,17,22,23 151:25 152:6,12 152:19 153:5 155:13 159:9 170:4,5,13 171:23 172:12 172:13 176:3 195:20 196:7 210:19 220:7 224:19	plan's 143:9,11 planning 29:21 31:12 40:18,23 41:8 76:18 210:11 plans 30:19 41:21 87:8,17,21 88:3 195:17 pleadings 32:25 please 6:9,14 7:19 8:22 9:9 11:10 plus 138:4,11 139:10,15,20 147:12 pocotlito 170:19 170:20 point 46:4 53:2 58:13 130:14 156:5 173:20 185:5 191:17,19 191:20,24 193:21 212:5 213:15 220:11 points 10:7 100:17 212:7 poke 166:9 polar 35:15 polarized 76:19 76:23 political 52:18 54:9 59:25 63:10 66:23 68:10 69:24 75:4 76:9 77:3,9 77:16 78:4,8,10 78:11,17,20,24 79:4 151:2
---	--	---	---

[political - presented]

Page 31

161:3 162:21 179:7 186:16 189:22 193:22 211:19 215:15 politically 215:18 politics 50:13 77:15 79:7,13,14 179:2 186:24 193:23 200:12 200:20 polsby 135:17 143:23 pond 202:2 poor 206:14 212:4,11 pop 138:5 139:20 popped 165:17 popper 135:17 143:23 population 89:20 90:21,22 90:23 96:16,21 97:24 98:3,9,13 98:20 100:11,25 101:10,14,17,20 102:2,11 103:19 104:7 106:16,21 107:15 108:7 110:17,21,22,24 110:25 111:4 116:18 118:17 120:23 127:10 136:16,23 138:8 138:16,20 140:3 149:8 150:3 153:19 154:9	155:3,20 157:22 176:21 177:2,10 186:17 187:4 197:22 198:4 200:11,20 205:5 205:6 224:14 populations 90:12 porter 2:5 portion 181:25 portions 169:15 179:21 181:5 position 198:5 209:16 possibility 200:6 200:9 possible 12:5 post 123:10 160:16 postponed 80:2 potential 31:3 82:24 167:5 potentially 87:22 power 217:18 practice 112:13 practicing 9:17 pre 113:3 121:21 precedence 217:9 preceding 85:16 174:23 precinct 148:23 157:19,24 170:12 171:7,18 171:22 172:9 174:12 176:2 181:11,12 182:3	190:10 196:18 196:20,24 197:3 197:11,18 198:6 198:9 199:2,18 199:20 201:5,24 202:3 203:8,25 204:2,3,11,14,17 205:7 206:13 207:12 208:19 208:21 precincts 104:11 157:6,10,12 158:7 159:12 160:15 161:17 162:8 163:8 169:14,15 170:3 170:17,18,21,24 171:9,13 172:5 172:11 173:8 174:25 176:9,14 176:18,25 177:8 177:11 178:19 179:4,21,22 180:18,23,25 181:3,5,6,16 182:8,22 183:3,7 183:11,14,20 185:5 187:15 188:5 190:21,23 193:15 194:5 199:12 200:3,25 201:12,18 205:8 205:11,20,24 206:17 207:4,6 207:14 208:3,7 208:10,19 209:6 precise 64:2 108:18 161:7	precisely 160:18 precision 162:10 163:6 predict 197:9 predictor 196:16 198:13 predictors 198:9 predominant 113:21 preferred 72:25 prepare 43:21 82:19 83:6 84:6 84:12,16,17 85:3 193:24 prepared 26:19 27:6 28:15 42:16 43:12 44:15 46:25 preparing 25:20 39:3 prerogative 217:12 present 4:15 30:9 76:18 83:15 86:5 96:20 103:19 104:4 106:20 108:6 119:16 128:23 156:5 193:14 208:23 208:24 210:3 presentation 155:19 presented 20:17 30:21 41:9 86:20 96:25 105:5 108:9,11 120:15 137:25
---	---	--	--

[presented - purpose]

Page 32

144:10 156:15 211:9 216:25 presenting 103:22 117:6 119:17 124:5 204:20 presents 100:3 151:11 206:8,9 211:2 preservation 116:12 preserving 199:12 220:5 presidential 77:18 pressuring 126:6 presumably 37:8 37:9,10 pretty 32:14 43:17 71:18 79:6 118:21 121:16 201:22 prevent 11:6 previous 79:21 86:2 109:14 123:21 124:7,21 191:25 previously 81:3 90:15 132:6 179:20 185:24 195:10 primarily 216:21 primary 77:18 principle 212:18 principles 74:10 76:8	prior 87:11 private 6:11 probably 44:21 52:12,17 58:2 59:23 60:8 65:10 66:15 69:18 78:14 96:5 123:16,23 150:19 159:3 173:22 196:11 212:13 214:20 215:23 problematic 207:11 208:8 procedure 174:22 proceeding 77:6 77:13 process 21:5 74:12 87:18 97:17,17 101:13 101:13 133:3 144:15 159:4 214:19 217:4 processed 97:13 141:8 156:18 158:3 160:3 169:4 175:15 178:8 179:15 180:12 184:10 processes 97:5 processing 97:15 98:16 produce 88:15 produced 23:21 38:3 160:3 182:7 214:11	production 57:14 professional 47:15,20 48:11 49:5,11,14,20 50:2,18 program 78:12 projected 34:16 89:24 projecting 34:21 projection 34:16 35:7,9,13,13,23 36:2,4 projections 35:5 35:20,21 prominently 16:24 prompted 52:10 promulgated 95:25 pronounce 61:19 proof 113:17 114:25 208:23 208:24 proper 204:25 properly 198:10 proposed 137:20 142:25 prosecution 68:19,23 70:5 prospects 109:23 186:6,10 187:5 187:10 protect 123:16 protection 114:19 protrusion 128:12,13	provide 23:9,14 27:10 29:7 45:12,16 47:5,23 48:14 49:8,17 75:16 81:24 provided 19:3 19:14 20:13 22:14,17 31:3 52:25 56:20 71:22 74:18 81:3 82:23 84:9 84:20 87:12 90:4 97:6 99:14 137:3 141:10 150:22 178:9 180:13 provider 72:25 pruet 3:5 public 1:23 5:16 8:18 33:7,13,18 34:10 222:12 226:25 publication 211:3 publications 53:25 publicly 21:3 published 48:23 54:3 78:23 103:5 pull 19:13 25:23 58:2 pulling 25:13 pure 63:3 purpose 117:5 119:17 124:5 125:8
--	---	---	--

[purposes - realistic]

Page 33

<p>purposes 10:4 50:3 61:3 123:11 156:21 189:11 201:21 pursuant 1:21 20:9 21:8,25 22:20 24:18 pursuing 126:3 put 204:12 205:13 217:13 puts 134:19,24 putting 41:19 142:18 174:4 204:25</p>	<p>167:3 168:23 171:20 183:6 184:20 189:5 192:20,22 193:6 195:13 201:4 207:18,23 209:2 209:11 213:19 questioning 63:24 123:22 questions 10:14 46:5 55:7 57:3 76:10 143:8 144:2 155:16 174:5 210:9 218:9,12,14,19 218:22 219:3 220:13 quibble 92:10 quick 56:5 111:5 168:4 194:12 quickly 27:17 quite 161:19 quote 203:6 quoting 109:5 203:10</p>	<p>169:4 175:15 178:8 179:15 180:13 184:11 185:23 222:2,10 222:25 race 77:21 103:20,23 109:7 113:21 200:4,11 200:20 races 77:18 racial 59:25 62:5 62:10,11,13,15 62:19,25 73:7 104:4,8,13,19 108:6,10,12 111:19,23 112:5 112:24 113:17 114:5 136:5 142:11 171:12 174:21 177:15 183:25 197:13 racially 76:19,23 radical 205:17 radically 123:15 124:15 raffensperger 82:9 ragusa 36:23 37:11 40:15 41:2 49:23 114:10 195:12 195:16,21 196:13 198:6 199:7 200:23 203:12 209:18 ragusa's 39:9,12 49:5,8,11,20 91:24 196:4</p>	<p>198:19 203:6,10 203:23 204:4 206:20 raised 104:25 raises 201:25 randolph 60:20 62:17 range 65:10 66:15 89:11 164:13 rankin 3:18 13:12 rate 24:11 25:2 92:25 101:21 102:11 115:18 198:11 215:12 rates 214:4,13 215:2 216:7 reached 15:4 16:4 30:16 reaching 20:25 151:7 read 7:20 42:7 48:23 73:11,21 75:20 82:20 91:23 106:23,24 112:8,13 114:21 137:22 186:13 187:7 190:2 201:7 reading 40:3 112:12 118:13 142:9 181:9 reads 112:14 ready 25:18 real 79:7 realistic 148:16 149:2,3,21</p>
q			
<p>qualifications 47:20,23 48:11 48:14,18 49:3,5 49:8,11,14,17,20 50:2 75:8,14 qualified 48:2 50:19,22 77:24 question 5:11 10:18 11:13,14 32:24 37:2 38:9 39:8 40:22 43:22 45:18,25 46:14,21 48:5,13 49:7,16,22 52:3 59:13 60:6 79:2 79:21 87:15 91:20 92:3 95:18 96:14 113:2 119:14,15 132:20 135:20 140:12 142:17 150:17 151:6</p>	<p>r r 1:21 2:2 3:2 4:2 8:16,16 9:12 61:16,16,16 69:14,14 90:4,4 90:5,19 97:5,13 97:15,23 98:16 118:17 132:2,5,5 141:9,9 144:18 144:20 156:19 157:10 158:3 159:18 160:3</p>		

[realistically - reflects]

Page 34

realistically 149:16	194:10 195:8,22 210:13 219:3,23 223:17	167:8 168:12,17 186:9,14 187:16 187:20 188:8,12 188:13,15 194:23 195:4 214:24 218:4,7 220:4,15,21	214:18 216:2 224:7,21
really 33:11 39:6 63:3 102:13 119:22 135:18 136:2 144:14 190:11 205:17 214:15 219:19	recall 20:15 22:25 29:3 52:14 55:2 69:19 78:22 97:18 170:23 192:7 198:24 219:12,16	recorded 6:23 recording 6:18 records 24:6,6,6 25:9,9 187:8 recreate 20:16 redistricting 14:12 15:11 16:8,17 17:7,11 17:17 33:8 34:12 60:7,11,13 60:15,16,18,19 60:21,22,24 61:6 61:7,10,12,17,24 62:8 64:11,25 66:9 67:15 68:22 70:12 71:23 72:16 74:10 76:8 86:8 86:10,11,14 93:7 93:17,19 94:16 95:25 97:11 99:13,23 107:10 126:5 133:6,13 137:6 142:24 156:18 157:15 158:19 159:7 162:22 163:17 163:22 165:3 186:12,15,18 199:9 209:11,14 209:20 211:23	redraw 122:16 124:11 204:18 213:16 redrawn 207:2 reduces 147:5 reducing 199:12 reduction 147:9 reelected 110:9 reelection 109:23 110:15 refer 85:14,23 95:18,20 96:4 186:24 reference 61:4 186:16 191:24 201:9 206:12 referenced 37:15 39:17,21 85:16 references 38:4 referred 85:24 171:18 referring 33:18 33:19,24 85:13 96:3 140:19 170:15,19 173:2 176:12 219:10 219:15 refers 86:2 159:16 170:17 reflect 58:5 reflected 25:10 54:7 reflecting 20:4 21:22 178:20,22 reflects 58:11 111:17
realm 110:3 reason 10:21,24 34:25 40:4 43:11,23 45:6 46:24 48:18 58:17,19 75:15 81:5 82:12 101:19 104:3 106:10 107:20 108:17 111:9 113:25 122:11 122:20 123:3,3 158:9 226:8 reasonable 42:21 160:5 163:14 215:8,13 216:19 217:6 reasons 30:4 200:2 rebuttal 27:20 27:25 28:6,13 36:10,11 39:3 40:12,14,25 41:13,19,22 42:6 42:11,20 43:2,4 43:7,14 44:2,16 44:19 45:5,22 46:19,23 58:6,20 73:11,21 75:21 81:24 82:20	receipts 57:21 58:4 223:23 receive 54:18,24 55:8 received 57:13 109:3,10 recess 56:13 91:11 130:22 168:15 195:2 218:5 recipient 198:4 recognize 203:12 recollection 21:13 82:16 83:2 113:7 123:19 reconfigured 125:22 record 6:8,20 7:18 8:23 9:10 10:6 19:11,16 56:10,16,22 57:16 75:23 76:3 85:12 91:8 91:13 99:21 109:16 130:6,19 132:11,24 140:20 142:23		

[refresh - representative]

Page 35

refresh 113:6	38:13 39:10,18	28:13,24 29:4,8	169:3 171:22
regard 41:18	86:13 123:14	31:19 32:10	176:7 184:15
43:22 45:19	rely 20:24 22:18	33:16 36:10,12	189:3,11 190:14
81:2 128:22	35:24 217:6	36:13,15,18,20	191:8,10 194:10
135:21 173:19	remain 153:11	37:13,15 38:8	195:8,22,25
213:20	172:13	39:4,15,18,21,22	198:18,19
regarding 42:17	remained 116:20	40:3 42:6,11,14	203:10 207:9
43:9 48:19	171:23 191:11	42:17,20 43:2,4	210:8,13 211:9
91:19 217:5	remains 171:17	43:7,10,10,12,14	214:23 219:4,23
regardless 217:3	182:4	44:2,17,20,24	223:15,17
217:20	remedial 165:7	45:5,9,22,24	224:18,22
regards 42:11	165:14	46:3,6,19,23,25	reporter 1:22
regions 35:15	remember 38:16	47:3 49:2 51:7	7:12,19,20,25
regression	67:12 70:2	51:11,13,17,25	8:21 10:11
200:13,17 201:4	84:18 96:9	52:13 53:8 54:8	221:2 222:11
201:8 204:7	136:22,22	54:22,24 55:6,21	reports 25:4
206:21 207:3,17	187:21 198:18	57:9 58:6,15,21	29:10,11,20,23
208:25	remotely 6:22	59:7,8 81:11,12	29:25 30:2,7,14
regular 77:10	7:22	81:15 82:14	30:15,25 31:14
regularity 74:11	removal 208:10	85:6 86:5,20	33:2 36:21
rehabilitation	rendering 33:4	87:4,13 91:24	37:11,18 39:9,12
41:12	87:7,15 93:22	92:12 93:23	40:8,11,12,14,17
rehearse 42:12	99:17 123:12	95:8,9 106:13	40:19,24,25 41:4
relate 22:11	136:3 151:7	107:8 108:25	41:5,14,15,19,22
related 7:14 23:7	reock 135:16	109:6,11,18	44:4,5 45:13,16
50:14 222:18	143:22 144:13	111:13 116:8,10	47:6,24 48:15
relating 210:7	144:21,25	119:13 122:6,12	49:9,18 51:2,10
released 34:11	repair 170:12	123:12 124:2	64:3 69:4 73:11
88:9 133:13	repeat 10:18	125:5 126:24	73:21 74:16
relevant 74:5	188:2	129:9 133:19	75:21 82:20
120:17 121:4	rephrase 60:6	134:11 140:9	159:5
reliability 82:6	79:20 94:12	141:8 142:2	repository 86:11
reliable 208:25	replicate 210:21	144:2 148:19	represent 9:7
reliably 109:25	report 17:25	150:14 151:3	representation
relied 20:12,18	20:10,17 25:23	152:11,15 153:9	63:12
20:24 21:4	26:6,10,10,14,17	154:6,25 155:4	representative
23:16 31:21,25	26:19 27:5,11,18	155:15 158:20	13:18 109:9
32:15 37:5,8,16	27:20 28:2,6,7	159:7 168:21	

representatives 93:16 94:9	197:20 198:2	199:11 212:4,11	71:8,10 72:7,9
represented 64:19	respect 17:23 41:14,16 42:9 45:3 219:21	212:18 214:4,13 215:2,7,10,12 216:7,17 217:5 217:16,19	72:10 74:8 98:12,17 100:12 100:16,19 102:6 102:7 103:16,25 104:16 105:5,22 106:4,9 107:6,7 107:16 108:2,7 108:16 109:12 109:18 110:10 110:20 111:3 114:23 115:11 115:17,24 116:4 118:24,25 119:10 120:8,11 120:21,24 126:12,21 127:3 128:9 134:11 138:10 139:13 141:3,12,15 147:17 148:8 149:24 151:17 151:23 152:14 152:19,24,25 153:2,6,7,12 154:10,13,21 155:4,8 158:8 159:6 160:11,16 161:20,23 162:2 162:4,6 163:10 166:9 168:2 170:22 171:24 174:8,9 176:3 184:10 188:25 189:8 193:16,17 194:21 197:8 202:14,15,18,21 203:2,16,20,21
representing 64:15	respecting 41:4 148:23	revealed 163:13	
represents 22:10 33:10 106:24 145:15 169:12	respective 5:6 respond 45:13 responds 196:2 response 45:24 46:11,13,20 81:14 192:13 196:23 197:7	review 31:2 34:4 39:6 84:5,12,15 92:22 201:15 211:7	
republican 14:12 15:11 16:8,14,16 17:7 64:16,16,25 66:9 67:15 68:22 70:12 71:10 72:15,18,22 109:9 163:22 165:2 186:6,10 186:22 187:5,10	responses 46:2 responsible 216:11,21 responsive 22:24 31:9 38:23 rest 208:4 result 127:2 resume 56:7 resumed 56:14 retain 89:13 retained 96:16 96:22 220:19 retaining 23:4 retains 89:8 retention 89:16 89:22 91:19,21 92:8,15,20,24 94:18 95:5,7,16 95:23 96:8 98:9 98:11,13,20 100:11,25 101:21 102:12 102:15 103:20 104:7,9,13,16 105:3 115:18	reviewed 22:23 28:20 33:9 34:9 53:25 54:4,8 78:25 79:3 82:22 84:13,21 84:22 92:18 196:3 210:16 211:3 reviewers 27:10 reviewing 159:4 revise 45:15 revised 56:6 revolve 48:3 richland 178:2 178:18 179:8 184:2 187:13 193:13 199:20 199:24 202:19 202:20,24 212:19 213:4 219:11 right 10:2,4 29:23 31:11 36:18,23 40:4 44:25 46:12 53:2 56:3 57:11 58:7,14,16,23,24 59:6 64:7 71:3,4	
republicans 66:5 67:5 215:16 request 38:24 require 190:11 204:18 required 77:14 requirement 120:23 150:4 rerun 206:20 207:3 208:6 research 77:14 resent 56:6 reserved 5:12 reshape 205:17 residents 138:25 157:18,21,22 170:3,7,10,10 196:17,19 197:10,15,16,19			

[right - saying]

Page 37

204:21,22 206:8	s	107:1 108:1	180:1 181:1
206:10 209:15	s 2:2 3:2 4:2 5:2	109:1 110:1	182:1 183:1
211:10 212:6,12	5:2 6:1 7:1 8:1	111:1 112:1	184:1 185:1
217:23	8:16 9:1 10:1	113:1 114:1	186:1 187:1
rights 60:14	11:1 12:1 13:1	115:1 116:1	188:1 189:1
63:12	14:1 15:1 16:1	117:1 118:1	190:1 191:1
river 190:6,7,8	17:1 18:1 19:1	119:1 120:1	192:1 193:1
190:11 192:3,4,5	20:1 21:1 22:1	121:1 122:1	194:1 195:1
192:9,9,10	23:1 24:1 25:1	123:1 124:1	196:1 197:1
rmg 1:4 7:9	26:1 27:1 28:1	125:1 126:1	198:1 199:1
role 161:13	29:1 30:1 31:1	127:1 128:1	200:1 201:1
roman 85:17,25	32:1 33:1 34:1	129:1 130:1	202:1 203:1
114:16 220:10	35:1 36:1 37:1	131:1 132:1,2,2	204:1 205:1
room 12:12	38:1 39:1 40:1	132:2,5 133:1	206:1 207:1
rothstein 4:16	41:1 42:1 43:1	134:1 135:1	208:1 209:1
7:10	44:1 45:1 46:1	136:1 137:1	210:1 211:1
roughly 35:17	47:1 48:1 49:1	138:1 139:1	212:1 213:1
round 142:5,6	50:1 51:1 52:1	140:1 141:1	214:1 215:1
rounding 141:23	53:1 54:1 55:1	142:1 143:1	216:1 217:1
142:3	56:1 57:1 58:1	144:1 145:1	218:1 219:1
row 106:23	59:1 60:1 61:1	146:1 147:1	220:1 221:1
138:10	61:20 62:1 63:1	148:1 149:1	223:11 224:2
rows 106:23	64:1 65:1 66:1	150:1 151:1	225:2 226:8
rucho 60:17,23	67:1 68:1 69:1	152:1 153:1	samantha 2:21
62:13,18	69:14,15 70:1	154:1 155:1	sample 161:12
rule 81:10	71:1 72:1 73:1	156:1 157:1	sampling 161:7
161:10	74:1 75:1 76:1	158:1 159:1,18	sanders 68:15,16
rules 10:2	77:1 78:1 79:1	159:19 160:1	satisfied 64:2
run 48:2 50:10	80:1 81:1 82:1	161:1 162:1	saw 126:19
running 48:20	83:1 84:1 85:1	163:1 164:1	saying 29:6 50:5
56:8 193:20	86:1 87:1 88:1	165:1 166:1	54:24 98:11,19
runs 59:11	89:1 90:1 91:1	167:1,16,16	141:13 145:19
rural 118:21	92:1 93:1 94:1	168:1 169:1	160:9 162:25
rush 221:5	95:1 96:1 97:1	170:1 171:1	183:2 185:20
rutherford 92:5	98:1 99:1 100:1	172:1 173:1	187:2 189:23
	101:1 102:1	174:1 175:1	200:7,16 201:2
	103:1 104:1	176:1 177:1	209:10 214:8
	105:1 106:1	178:1 179:1	216:21

[says - set]

Page 38

says 54:16,17 89:7 100:6 105:3,8,10,15 113:19 114:16 118:21 139:14 140:21,21,24 143:9 148:5 151:13 173:6 201:16	sealing 5:7 sean 1:19 6:24 8:4,24 9:11 26:14 28:13 220:17 221:12 223:6 226:7 searched 46:23 second 24:25 89:6 99:19 102:23 111:15 118:15,18 148:4 148:5 159:11 172:19 176:15 186:4 194:20 205:14,15	148:13 151:10 151:14 152:3,5,7 156:10 159:10 159:14 161:22 164:17 169:16 171:3 176:4,10 180:20 182:13 190:10,22 195:18 206:21 seeing 101:15 136:23 179:24 seeking 50:4 73:15 seen 19:20 31:5 47:16 74:23 88:12,25 93:11 99:8 103:6 136:20,24 150:18 158:23 158:25 164:21 165:23 166:2,12 166:14,15 167:6 167:16 183:18 185:4	220:2 224:11,24 225:7 senate's 107:16 senator 13:12,14 send 37:21 155:24,25 156:2 sends 156:2,11 sense 47:21 50:17 62:22 76:14 77:22 142:7 177:14 199:18 sensitive 6:10 sent 12:17 22:23 24:19 26:2 27:19 53:7 57:25 89:2 159:2 165:24 sentence 37:4 186:4 sentences 196:22 199:17 separate 51:9 127:24 134:14 sequential 149:18 series 57:20 85:10 188:17 223:22 serve 80:7,16,24 served 43:4,6,7 45:5 session 83:11 sessions 83:8 set 29:22 30:24 31:9 67:24 68:5 83:12 94:4 96:24 107:12
--	---	--	---

[set - sort]

Page 39

110:23 195:22 199:16 205:7 210:13 220:4 222:21 sets 39:20 65:19 92:23 141:10 settlement 79:24 seven 69:4 71:24 137:15,19 158:7 161:16 163:8 shaded 169:14 169:17 174:13 179:23 183:20 shape 89:25 90:7 90:11,11,13,16 97:4,10 98:16 141:6 144:13,15 144:17 145:5,9 156:17 169:2 175:6,14 177:23 185:20,21,22 202:25 212:19 219:11 shaped 34:15 share 18:17 19:12 26:3 27:25 56:8 160:23 169:24 178:19 179:13 179:14 180:11 184:8 185:18,20 205:6 shared 179:16 shed 102:10 shedding 186:5 sheet 226:2 shift 36:9,12 155:14 158:5	163:18 177:2 180:16 181:13 194:9 204:15 shifted 159:24 169:15 170:18 171:13 176:14 177:2,11 179:4 181:12 183:8 193:16 194:5 shifts 107:15 108:7 176:7 182:20,23 183:2 183:10 187:4,14 215:15 shocked 166:4 shoring 214:15 shorthand 1:22 139:4 222:11 shortly 20:10 26:18 28:8 79:17 80:4 shot 149:23 show 42:19 51:14 98:23,23 122:21 124:7 163:25 166:19 174:17 189:9 showed 166:13 217:15 showing 125:9 125:10 193:15 shown 29:11,25 30:7 108:14 shows 102:11 106:21 155:18 156:7 169:14 179:21 185:5	side 137:6 162:20 207:13 sight 194:15 signature 222:24 signed 5:15,17 significance 35:9 94:2 167:20 174:2 significant 116:17 125:13 130:8 156:9 similar 55:5 121:24 155:19 similarly 109:8 simplicity 61:4 simulation 210:25 211:9,13 211:18,23 212:3 simulations 48:2 48:4,20,20,25 210:22 219:22 219:23 single 119:5 120:8 122:17 124:23 204:8 sir 9:14 27:24 107:22 sit 40:2 107:21 191:7 192:7,18 192:21,25 sits 134:3 sitting 30:19 42:4,15 43:24 44:14,25 45:19 45:20 46:12,15 159:21 160:2 182:10	six 69:4 148:14 220:19 sixth 113:22 114:4 115:2,7,9 115:19,20 205:13,16 size 35:17 198:6 198:9,13 199:2 200:21 sized 69:18 sketch 124:10 small 67:11 69:17 smaller 102:2 smallest 148:10 smash 34:24 smith 60:20 smoaks 201:23 201:24 203:5,7 207:20,24,25 social 7:23 112:19 software 211:13 sole 87:3 solutions 226:3 someplace 124:13 son 91:5 sorry 25:24 49:24 100:24 108:10 133:22 141:2,18 143:2 152:22 159:17 185:9 sort 41:12 60:5 119:14 161:14 173:13
---	--	--	---

[sound - statistical]

Page 40

sound 58:7,23 187:22	specific 35:21 45:2 78:18	170:12,13 176:2 199:12 202:5,9	111:21 116:12 117:2 155:17
sounds 58:24 196:9	176:7	219:15	195:11 196:12
source 86:9,15 86:23 96:24 107:5 141:4 144:10 156:14 189:18	specifically 94:21	splitting 152:13 188:24	started 25:13 starting 65:11 186:4 210:2
sources 39:20	specified 89:17	spoken 12:25 13:6,11,14,17,20	starts 59:10 95:10 148:25 178:2
south 1:3,6 3:9 3:10 4:7,9 7:3,7 11:24 13:7,21 15:8,18 17:3,7 17:12,25 18:8,12 36:7 76:24 77:4 77:10,25 78:3,7 78:10,16,19,24 79:4,9,10 85:18 88:3 93:6,15 94:8 112:23 116:19 117:8,20 118:20 119:20 121:9 125:15 137:5,19 140:16 142:20 169:8 173:7 175:18 178:12 184:23 202:4 212:20 214:19 224:6	speculate 67:2 spell 61:14 spelling 9:10 spent 24:13,21 25:20 55:10	14:2,5,8,11,15 14:20,22,24 15:13,17 16:15 17:10	state 1:23 7:3 8:22 9:9 51:8,17 52:2 54:14,22 61:24 64:9,12,17 70:20 76:16 77:13 78:11 84:11 88:4 117:9,11,13,17 119:21 121:11 121:13,13,18 124:9 126:3 153:19 154:13 154:15 155:7 198:19 222:5
spacial 55:22	spherical 34:20	spot 107:23	119:21 121:11 121:13,13,18 124:9 126:3 153:19 154:13 154:15 155:7 198:19 222:5
spartanburg 117:22 125:19	spitball 11:20 29:5	spread 35:16 spreadsheet 90:7 spring 32:13 52:19 54:11 181:25 182:2,3	state's 95:16 stated 186:14 189:3
speak 190:5	split 128:19,20 147:6,11 149:19 151:2,12 152:4 152:17 153:11 153:11,15,18,25 154:2,20 155:11 155:13 157:6 158:7 159:9,12 160:15 161:17 162:8 163:9 170:4 171:17,23 172:5,7,8,10,12 172:13 182:4,8 192:6,11 202:12 202:19 203:19 213:7,10,11,13 213:21	ss 222:6 staff 13:21 88:4 88:8,17,21,22 133:10,13 135:12,24 136:7 136:9,25 137:7 137:12,21 140:5 142:25 150:14 151:5,21 152:5 152:19 153:5 163:21 223:25 224:19	statement 29:13 30:4 37:4 195:14 210:4
speaking 119:3 172:6	splits 129:5,16 147:9,16,19 148:11,17 149:3 149:4,22 150:7 151:16,20,24 152:6,21,22 153:3,9,22 154:5	stamped 164:4 166:23 224:23 225:6	statements 112:18 188:18 213:2
special 90:8		stand 81:19 standard 92:24 143:18 160:7,25 162:14,24	states 1:2 7:6 35:22 71:24 122:17 126:4
		start 26:16 28:5 63:20 85:8 89:4	statistical 204:20,24

[statistics - sworn]

Page 41

<p>statistics 50:14 95:16 172:15 status 54:17 55:12 stay 204:11 207:20,24 stayed 101:16 103:23 105:11 105:16 159:23 stenographic 7:18 222:16 step 28:10 75:22 160:9 stick 104:23 stipulate 7:24 stipulated 5:4,9 5:13 8:6,8,10,12 stoner 190:7 192:4,9 story 124:17,19 149:5 strange 34:25 street 2:16 3:9 4:8 35:24,25 77:11 stretch 63:16 168:10 stretching 118:19 strider 69:14 70:7 strike 37:9 171:10,19 striking 149:10 struck 75:13 81:21 82:2,7 119:25</p>	<p>stubble 92:4 study 55:23 211:20 stuff 165:15 stylistic 27:14 sub 22:11,13,16 22:16 110:23 220:11 subcounty 156:25 subdivision 151:2 159:8 subdivisions 151:12 subject 211:2,7 subjects 50:16 submit 50:25 submitted 51:7 51:10,16 68:14 70:10 87:17 163:21 subscribed 221:14 226:22 subset 110:25 substance 83:3 84:2 substantial 33:15 44:5 45:23 198:3 substantive 36:5 subtract 205:24 213:4 subtraction 116:19 suburbs 125:21 213:24 succeeding 96:17,22 196:21</p>	<p>199:17 sufficient 20:16 24:10 82:5 217:22 suggest 190:13 suggested 35:5 107:8 suggesting 114:21,24 suggestions 27:13 summaries 136:23 summarize 97:24 98:2 146:20 196:25 197:2 summary 85:7 89:5 91:18 96:15 111:12 130:3 136:16 143:7 147:2 172:15 181:8 182:13 224:14 sumter 134:17 134:19 153:4 154:7,8,20 168:23 169:6 170:8,25 174:8 174:12 175:24 187:13 193:13 213:7,9 219:15 super 172:2 superimposed 183:19 supplement 31:13,16 40:23 43:17,20</p>	<p>supplemental 41:4 43:12,14 45:9,12 46:25 47:6 supplementary 43:10 support 216:19 suppose 92:11 supreme 60:4,10 60:12 72:4 sure 10:6 12:2 28:11 36:24 37:6 38:21 51:5 51:13 53:17 58:8 71:21 75:6 77:22 87:19 88:19 120:13 123:13 125:21 126:2 136:12 141:12 145:13 162:13 182:11 206:6 surface 34:19 surprised 73:22 76:21 surprisingly 116:20 130:5 191:11 swan 170:20 swear 7:19,25 switch 111:11 146:25 168:2 switching 132:23 168:3 sworn 5:15,17 8:18 132:6 221:14 222:13 226:22</p>
---	---	--	--

syllabus 75:3	take 6:18 7:22	talks 92:18 96:8	126:8
t	9:19 11:10	154:6 191:2	terrini 14:9
t 5:2,2 8:16,16	28:10 53:18,20	taught 54:11	testified 8:19
9:12 69:14	56:5,6 75:22	78:19	26:25 59:13
118:17 132:2,5,5	90:22,23 91:4	teaching 48:9	132:7 133:14
222:2,2 223:11	92:14 97:18	52:18 57:6	164:23
224:2 225:2	102:16 107:10	teams 65:16	testify 10:22
tab 19:18 25:25	113:8 130:14,17	technique	29:17 30:11
27:19 88:14	136:10 140:2	162:15	41:16,21 64:3
98:24 102:18,25	157:10 158:14	techniques	82:8
105:5,5 113:9	160:9 168:6	160:24,25	testifying 10:8
133:9 136:10,17	194:12 197:18	162:23,24	41:24 195:19
147:22,24	197:24 206:16	163:15	testimony 10:25
150:11,14	207:5,7 208:2	technology 1:20	11:7 41:22
158:14,20 164:2	217:8	tell 10:17 11:18	47:17 74:4
164:5,9 166:20	taken 1:19 6:25	18:2 21:7 22:19	75:12 77:9 81:3
166:24 195:9	8:20 12:22	33:10 43:24	81:4 82:11
220:3 224:8,15	56:13 78:13	45:2 62:4	220:16
224:17,20,22,25	91:11 97:3,10	106:15 124:25	tests 196:14
225:8	130:22 156:16	126:16 127:8,13	text 181:9
tabbed 93:4	156:17 168:15	135:6,11,19,21	thank 37:6 62:3
table 34:25	195:2 199:21	159:21 160:10	63:18 122:4
95:15,19,20	218:5	160:14 163:6	150:8 164:11
96:12,13,14,25	takes 127:9	170:10 172:16	218:10,23
98:10 103:18	taketh 102:9	179:4	220:13
104:2,6 106:13	talk 57:8 96:12	telling 160:13	thanks 135:20
106:15,16 107:6	104:24 130:16	tells 98:6,8	theoretical
107:14 108:5	147:4,18	tend 110:11	148:13
137:15 140:10	talked 15:20	194:19	theoretically
140:13,14,21	129:3 174:20	tender 73:23	149:21
141:5 142:9	191:9	tends 48:23	theory 74:8
144:3,4,5,11	talking 18:12	tenths 141:21	114:9
145:13 155:16	106:14 116:9	term 80:2	thing 11:12
155:17,18	118:4 170:6	138:19 167:19	118:6 142:3
156:15 162:25	176:6,8 177:16	172:21 174:2	206:11 207:11
tag 123:18	182:18 189:25	198:12	217:6
	197:4 203:4	terms 57:6 77:23	things 31:9
	209:7 212:17	89:20 104:13	32:13,14 40:11

[things - trende]

Page 43

44:9 46:10	209:24 210:15	193:21 194:22	197:16,19,25
112:18 117:11	214:19 215:8,14	195:3 218:3,6,9	205:5 220:18
122:19 124:17	215:19,22	219:9 221:6	totals 147:14
125:22 147:12	216:12,13,15	timeline 12:3	touches 144:23
173:15 181:23	217:12,16,20,20	217:2	traditional
189:2 191:18,22	218:2 219:7	times 11:19,21	74:10 76:8
199:11	thinking 173:21	24:20 83:5	199:9
think 9:15 11:25	215:8	134:2 139:3	traditions 76:15
19:18 23:3,6	third 45:12	title 61:22	123:6
36:25 38:19	55:16 89:5	tjh 1:4 7:9	training 78:7,15
40:4 47:25 48:4	91:18 117:18	today 10:8,22	112:16
51:10 53:21	147:4	11:2,7 12:15	transcribing
55:20 57:4 58:3	thomas 1:11	24:3 30:20 34:6	10:11
64:4 66:20	2:15 3:18 7:5	42:4,16 43:24	transcript 6:6
67:25 69:16	226:5	44:14 45:20,20	84:11 221:3,5
70:9 71:5,18	thorough 111:15	46:15 83:24	225:11
73:19 74:12	thought 42:8	84:12,17 117:16	transcription
75:7,25 76:7	44:10,21 51:4,12	120:17 121:14	222:15
77:8 79:17	174:16 199:3,4	150:23 182:10	transcripts 33:7
83:13 84:10	213:15 216:23	191:9 219:3	33:14,19 34:9
109:20 113:25	thoughts 44:7	today's 6:4,6	84:6,8,16,17
117:7 121:3,25	three 61:2 65:18	10:5 12:8 82:19	transferred
122:13,16,20,25	82:17 142:10	83:6,19 84:6	21:14 37:19
128:10,20 129:3	146:15 152:6	85:3 220:16	transformation
133:14 143:4,15	196:14 197:2	tool 82:4	35:6
147:13,17,17,19	206:9 207:8,10	top 32:17 61:8	transformed
148:15 152:25	thunder 187:17	65:11 96:9,13	125:24
157:7 164:23	time 5:12 11:9	111:14 113:16	transmitted
165:17 171:4,6,8	24:6,12 25:8,11	114:15 138:10	38:15
172:9,17 173:3	25:17,20 44:10	151:10 159:11	treat 207:18
179:6 181:2,17	45:4 46:22	170:2 181:14	208:19
182:13 183:24	55:11,20 56:9,15	182:16	treats 200:24
186:22 189:23	91:4,7,12,25	torchinsky 15:14	201:18 207:12
190:18 191:17	104:22 117:12	total 90:21,22,23	trende 1:19 6:1
191:19,19	120:3 130:18	97:24 98:2	6:24 7:1 8:1,5
192:24 193:20	132:10 168:11	101:10 106:21	8:24 9:1,6,11
194:7 196:10	168:16 173:24	110:17 153:22	10:1 11:1 12:1
199:16 201:21	185:4 188:11,14	182:23 197:15	13:1 14:1 15:1

[trende - two]

Page 44

16:1 17:1 18:1	117:1 118:1	193:1 194:1	163:22 165:3
19:1 20:1 21:1	119:1 120:1	195:1,7 196:1	truthful 11:6
22:1 23:1 24:1	121:1 122:1	197:1 198:1	truthfully 10:22
25:1 26:1,15	123:1 124:1	199:1 200:1	try 11:11 34:24
27:1 28:1,14	125:1 126:1	201:1 202:1	72:13 81:11
29:1 30:1 31:1	127:1 128:1	203:1 204:1	124:11 189:10
32:1 33:1 34:1	129:1 130:1	205:1 206:1	197:9 209:15
35:1 36:1 37:1	131:1 132:1,14	207:1 208:1	trying 62:10
38:1 39:1 40:1	133:1 134:1	209:1 210:1	63:8 119:15
41:1 42:1 43:1	135:1 136:1	211:1 212:1	173:17 177:7
44:1 45:1 46:1	137:1 138:1	213:1 214:1	189:12 198:11
47:1 48:1 49:1	139:1 140:1	215:1 216:1	204:23 215:9
50:1 51:1 52:1	141:1 142:1	217:1 218:1,10	216:6
53:1 54:1 55:1	143:1 144:1	219:1,2,25 220:1	turkey 171:4,4,6
56:1,19 57:1	145:1 146:1	220:17 221:1,12	turn 6:14 19:23
58:1 59:1 60:1	147:1 148:1	223:6 226:7	59:7 93:3 96:11
61:1 62:1 63:1	149:1 150:1	trial 1:19 5:12	98:24 102:18
64:1 65:1 66:1	151:1 152:1	29:14,17,23	111:2 113:15
67:1 68:1 69:1	153:1 154:1	30:10,17,21 40:7	116:6,10 123:25
70:1 71:1 72:1	155:1 156:1	41:8,25 46:10	140:8 143:25
73:1 74:1 75:1	157:1 158:1	50:11 81:21	147:2 148:15,18
76:1 77:1 78:1	159:1 160:1	195:16,19,21	150:10 155:15
79:1 80:1 81:1	161:1 162:1	210:5,10	164:2 168:20
82:1 83:1 84:1	163:1 164:1	trickier 157:5	174:10 175:8,9
85:1 86:1 87:1	165:1 166:1	tried 73:23	177:25 179:17
88:1 89:1 90:1	167:1 168:1,20	82:13	183:15 184:12
91:1,16 92:1	169:1 170:1	trouble 140:18	186:2 195:7
93:1 94:1 95:1	171:1 172:1	troutman 68:15	209:25 220:2
96:1 97:1 98:1	173:1 174:1	68:15,16	turned 20:20
99:1 100:1	175:1 176:1	true 176:20	21:16 23:2,20
101:1 102:1	177:1 178:1	205:4 222:15	turning 20:22
103:1 104:1	179:1 180:1	trump 162:11	24:4 128:2
105:1 106:1	181:1 182:1	178:19	178:14 199:6
107:1 108:1	183:1 184:1	trust 14:13	turnout 75:4
109:1 110:1	185:1 186:1	15:11 16:8,17	twice 83:7 172:3
111:1 112:1	187:1 188:1	17:7 64:25 66:9	two 29:10,23,25
113:1 114:1	189:1 190:1	67:15 68:22	30:7,25 32:17
115:1 116:1	191:1 192:1	70:12 72:16	42:25 43:8

[two - voted]

Page 45

<p>44:18 55:14 98:3 102:13 120:14,15 122:13 141:21 141:21 147:12 176:24 181:16 185:6 type 162:16 210:25 types 137:24 205:20 typical 160:6 typically 76:10 198:8,11 typo 95:19</p>	<p>63:2 81:9,20 93:25 94:3 111:25 114:13 120:16 138:4,5 139:6,22 165:21 190:12 209:22 214:18 understood 130:7 170:16 undisclosed 81:22 union 2:12 unit 6:22 56:11 56:17 91:9,14 130:20 132:12 168:13,18 194:24 195:5 united 1:2 7:6 units 220:18 universe 160:17 university 54:15 unrecognizable 117:15 119:24 120:2 121:15 unusual 43:18 45:15 47:7 update 52:10 updated 52:7,18 52:25 53:9 54:12 56:21,24 223:20 updates 52:21 57:5 upheld 111:18 111:22 upper 69:5 use 19:2 36:4,6 52:12 55:22</p>	<p>91:25 94:9,15,24 95:4,6 124:10 139:3 148:22,24 160:22 162:23 172:21 184:4 192:3,8 198:12 198:16 useful 181:23 183:24 206:6 208:25 useless 185:13 uses 35:25 163:16 usually 80:12 215:11 utilized 86:15</p>	<p>veritext 7:11,13 8:2 220:20 226:3 version 52:3 versus 7:4 60:18 61:20 81:17 112:14 204:16 video 6:17,23 videoconference 1:18 videographer 4:16 6:7 7:12 56:9,15 91:7,12 130:18 132:10 168:11,16 188:11,14 194:22 195:3 218:3,6,11 220:14 violate 114:19 violated 191:15 193:11 virginia 60:4,11 62:7 72:4 149:12 virtual 1:16 8:2 visibility 216:3 vitae 51:20 56:25 223:19,21 vogel 15:12 voice 173:24,25 volume 73:4 vote 110:19 111:2,14 160:17 178:19 205:6 voted 159:23 160:10,15</p>
<p>u</p>	<p>u 5:2 41:6 61:16 118:17 ultimately 205:21 um 107:17 unavailable 83:24 underlying 39:19 understand 10:7 10:10,14,18 11:15 32:24 71:21 132:15,21 137:18 142:16 145:13 167:23 171:21 184:20 200:11 208:22 216:10 understanding 16:11 45:11 47:4 48:6,16,21</p>	<p>v</p>	
		<p>v 60:17,20,21,23 61:5,8,9,10,11 61:15,16,25,25 62:13,17,18,24 63:5,9,16,17 81:25 82:9 120:24 122:9 123:10 226:5 valid 102:5 valley 181:25 182:2,4 variable 196:16 196:23 variant 185:3 variation 179:19 183:17 various 31:25 35:4 144:16 verified 8:4</p>	

[voter - work]

Page 46

voter 156:21,21 voters 61:5 63:21 66:21,25 67:3 103:23 109:24 110:2,4 110:11,18 153:24 155:24 156:7,12,13 157:4 158:5 159:22 160:10 160:14 162:11 162:11 163:2,4 163:10 180:19 181:4 votes 109:3,10 156:24 157:17 157:25 160:19 180:24 voting 52:19 54:10 55:23,25 60:14 63:11 76:19,23 110:20 110:21,23 111:4 138:8,15,20 140:3 154:9 155:3 157:21 196:17,19 197:11,20,22 198:2,3	97:7 wallace 3:7 wandered 117:11 119:22 121:12 want 10:5 19:11 19:23,25 31:20 33:9 36:9 46:6 52:23 58:4 59:8 63:18 89:4 98:23 99:20 111:13 116:6,24 119:12 120:13 122:7 133:8 139:24 140:8 141:11 145:13 147:2 148:18 154:8 158:12 168:4,22 175:9 177:6 180:15 185:25 194:11 194:12 195:7 217:24 wanted 57:7 71:20 92:10 118:2 120:16 wappo 190:7 192:4,10 wards 182:22 183:3 washington 2:8 3:20 way 16:13 18:4 18:10 31:12 40:24 59:23 60:8 62:19 64:5 74:4 98:17 101:5,19 112:15	121:8 124:8 126:15 128:17 142:18 157:7 158:2 179:24 186:5 187:9 198:7 199:3 201:20 202:16 208:12 ways 35:10 102:14 we've 127:5 185:4 web 150:25 website 33:8,14 99:13,14,24 103:6 150:20 159:8 websites 133:6 wednesday 83:10 week 89:2 weird 181:21 welcome 132:14 went 22:21 79:24 118:18,19 187:22 216:4 west 137:6 182:24 183:10 western 182:18 wgs84 34:16 35:7,9,22 36:2 whispering 6:11 white 105:10 whites 105:10 whitford 60:21 62:17 wide 35:16	widespread 211:18 wife 13:3 80:12 84:2 wife's 167:25 wilder 170:19 williams 207:22 windsor 159:20 witness 7:19 8:2 8:3,17 18:25 81:19 91:3 116:15 132:18 168:8 192:15 194:14,21 222:13,20 223:2 223:5 226:7 women 61:5 63:21 word 92:8 94:24 95:2,4,6 words 199:25 202:23 204:4 205:20 work 12:25 15:5 16:12,13 19:5 24:7,15,24 25:9 25:16 31:15 40:11 41:4 48:23 58:12 59:9 60:3,10,12 60:13,17 62:9 64:19,21 65:2,13 66:10,17,18 67:16,21 69:8,9 69:21 70:13,18 70:22 71:21 72:4,5 211:14
w			
wadmalaw 190:8 192:5,10 wait 152:20 waived 5:8 walk 19:25 32:11 42:13 59:20 63:19			

[worked - zoom]

Page 47

worked 15:25 16:2,3 65:21 69:13 70:24 149:23 165:6,10	171:8 172:17 176:16,19 185:19 202:8 212:16 213:6
working 18:17 64:14,15 67:4,22 165:8	year 15:3,15 54:18 59:16
works 209:20	years 117:14,18 121:25 124:11
write 43:19 55:16 95:15,23 116:17 118:8 119:7 128:24 170:2 180:17 186:4 196:14 200:22 203:5,22 213:25	191:14,18 199:23 212:21 212:22 213:6,9 213:16,17,18,24 219:9,10,19,19
writing 26:16 28:5 32:14 173:22	yesterday 38:4 57:24 165:24
written 21:4 55:14 79:6	yesterday's 57:14
wrong 213:5 217:2	york 1:23 2:17 2:17 7:11,14 16:25 67:21 69:2 165:7,15 220:20 222:5,7
wrote 142:13	z
x	z 61:20
x 1:5,13 223:11 224:2 225:2	zero 26:2 149:22 204:12
y	zip 165:21,22 166:3 167:15
yeah 27:13 53:6 68:3 72:11 74:23 77:8 84:10 91:23 127:23 138:23 140:23 152:21 152:22 154:14 154:18,18,22 157:9 166:13,17	zoom 1:16,20 83:7

Federal Rules of Civil Procedure

Rule 30

(e) Review By the Witness; Changes.

(1) Review; Statement of Changes. On request by the deponent or a party before the deposition is completed, the deponent must be allowed 30 days after being notified by the officer that the transcript or recording is available in which:

(A) to review the transcript or recording; and

(B) if there are changes in form or substance, to sign a statement listing the changes and the reasons for making them.

(2) Changes Indicated in the Officer's Certificate. The officer must note in the certificate prescribed by Rule 30(f)(1) whether a review was requested and, if so, must attach any changes the deponent makes during the 30-day period.

DISCLAIMER: THE FOREGOING FEDERAL PROCEDURE RULES ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

THE ABOVE RULES ARE CURRENT AS OF APRIL 1, 2019. PLEASE REFER TO THE APPLICABLE FEDERAL RULES OF CIVIL PROCEDURE FOR UP-TO-DATE INFORMATION.

VERITEXT LEGAL SOLUTIONS
COMPANY CERTIFICATE AND DISCLOSURE STATEMENT

Veritext Legal Solutions represents that the foregoing transcript is a true, correct and complete transcript of the colloquies, questions and answers as submitted by the court reporter. Veritext Legal Solutions further represents that the attached exhibits, if any, are true, correct and complete documents as submitted by the court reporter and/or attorneys in relation to this deposition and that the documents were processed in accordance with our litigation support and production standards.

Veritext Legal Solutions is committed to maintaining the confidentiality of client and witness information, in accordance with the regulations promulgated under the Health Insurance Portability and Accountability Act (HIPAA), as amended with respect to protected health information and the Gramm-Leach-Bliley Act, as amended, with respect to Personally Identifiable Information (PII). Physical transcripts and exhibits are managed under strict facility and personnel access controls. Electronic files of documents are stored in encrypted form and are transmitted in an encrypted fashion to authenticated parties who are permitted to access the material. Our data is hosted in a Tier 4 SSAE 16 certified facility.

Veritext Legal Solutions complies with all federal and State regulations with respect to the provision of court reporting services, and maintains its neutrality and independence regardless of relationship or the financial outcome of any litigation. Veritext requires adherence to the foregoing professional and ethical standards from all of its subcontractors in their independent contractor agreements.

Inquiries about Veritext Legal Solutions' confidentiality and security policies and practices should be directed to Veritext's Client Services Associates indicated on the cover of this document or at www.veritext.com.